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**Lea's Unionid Types**  
or  
**Recent and fossil taxa of Unionacea and Mutelacea introduced  
by Isaac Lea, including the location of all the extant types**

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**Isaac Lea (1792-1886)**  
**LL.D. Harvard 1852**

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Addenda to be included with:

Lea's Figured Unionid Types (1974)

By Richard I. Johnson

This list is for inclusion with Johnson (1974) who relied on the work of Richards and Old (1969) as the last word on the location of the Unionid types which Isaac Lea figured from the J.C. Jay and W.A. Haines collections both of which are housed in the American Museum of Natural History, New York City. Recently, Boyko and Sage (1996) relocated a number of these which were overlooked by Richards and Old, and selected them as lectotypes under article (74 b) of the International Code of Zoological Nomenclature (1985). They were all refigured. Under the earlier Code Johnson would have called them "figured holotypes." Complying with present Code, Johnson's previous designations, unless Lea clearly had single specimen, must be regarded as lectotypes inadvertently selected. The newly located lectotypes, as well as a figured syntype, and a probable one are listed here. The location of paralectotypes is not included.

*bairdianus* Lea, 1857, *Unio*: (Devils River, [Val Verde Co.], Texas, Lea collection and Smithsonian Institution [not found]; "Mississippi" loaned by J.G. Anthony). Male specimen thought to be the one loaned to Lea, probable syntype MCZ, 316413.

*callosus* Lea 1841, *Unio*: (Ohio Canal...Ohio [erroneous, Central America]; J.C. Jay collection, Holotype AMNH 30561, only specimen, refigured by Boyko and Sage (1996: 24, fig. 8).

*cucumoides* Lea 1840, *Unio* (Hunter's River, New South Wales, Australia; J.C. Jay collection). Holotype AMNH 30897, only specimen, refigured by Boyko and Sage (1996: 24, fig. 9).

*hainesianus* Lea 1856, *Unio*: (Siam [Thailand]; W.A. Haines collection). Lectotype AMNH 31070 is the specimen figured by Lea, refigured and selected by Boyko and Sage (1996: 25; fig. 10).

*lutens* Lea 1856, *Unio*: (Newville, Burma [Myanmar]; W.A. Haines collection). Holotype AMNH 29109, only specimen, refigured by Boyko and Sage (1996: 26, fig. 11).

*montezuma* Lea 1841, *Anodonta* (Central America; J.C. Jay collection). Holotypes AMNH 30871, only specimen, refigured by Boyko and Sage (1996: 11, fig. 2).

*sloatianus* Lea 1840, *Unio*: (Chattahoochee River, Georgia; J.C. Jay collection). Holotype AMNH 56104, only specimen, refigured by Boyko and Sage (1996: 27, fig. 12).

*subcylindracea* Lea 1838, *Anodonta*: (Oak Orchard Creek, Orleans Co., New York; Lea collection [not found]; J.C. Jay collection) Syntype AMNH 31131a) figured by Boyko and Sage (1996: 11, fig. 3).

## LITERATURE CITED

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- Richards, M.C. and W.E. Old, Jr. 1969. A catalogue of molluscan type specimens in the Department of Living Invertebrates, the American Museum of Natural History. Department of Living Invertebrates, American Museum of Natural History. 147 pp.

R.I. Johnson 1998

# LEA'S UNIONID TYPES

or

RECENT AND FOSSIL TAXA OF UNIONACEA AND MUTELACEA INTRODUCED BY  
ISAAC LEA, INCLUDING THE LOCATION OF ALL OF THE EXTANT TYPES.

By Richard I. Johnson

Between 1828-1874, Isaac Lea described as new 851 species of Unionacea and Mutelacea, recent and fossil. Only three of the recent species were not figured by Lea; the fossil ones, initially unfigured, were subsequently figured by Whitfield (1885). All but 86 of Lea's measured or figured types have been located. Among these species for which the figured types could not be located are lectotypes, syntypes or quasi-authentic material for 38 of them.

While the majority of Lea's figured types are in the National Museum of Natural History, quite a number are in the Academy of Natural Sciences of Philadelphia (Johnson, 1973); some are in the British Museum (Natural History) (Johnson, 1971); a few are in the Museum of Comparative Zoology (Johnson, 1956) and the American Museum of Natural History (Richards and Old, 1969); and several others are located elsewhere.

Lea spent most of his long life in Philadelphia, Pennsylvania, where he was intimately associated with the American Philosophical Society and the Academy of Natural Sciences. From 1828-1852, with the exception of two small papers (Descriptions of a new Unio [Unio spinosus], 1836, pp. 1-4, col. pl., and Descriptions of Twelve Uniones, 1834, single sheet) all of Lea's new unionids appeared in the publications of the Philosophical Society. Some first appeared in the Proceedings with brief Latin descriptions and a single set of measurements; these were later augmented by more elaborate English descriptions which appeared in the quarto Transactions of the Society with figures of the measured specimens.

From 1852 until 1874, Lea published brief descriptions, still with a single set of measurements, in the Proceedings of the Academy. The measured specimens were eventually adequately described and figured in the second series of the Academy's Journal which was published in large quarto. The monographs from the Transactions and Journal were repaged and issued under the title, Observations on the Genus Unio (vols. 1-5 from the Transactions, 6-13 from the Journal. Three privately printed indices, 1867, 1869, 1874, were also distributed). Lea also wrote four Synopsis of the Family of Naiades (1836, 1838, 1852, 1870); of these all were privately printed, save for the edition of 1838.

Scudder (1885) compiled an elaborate bibliography of the published works of Lea. It included all of the recent unionid taxa introduced by Lea, but not the fossil ones which are included here. Lea attempted to date his taxa from the date that they were read before the Philosophical Society or Academy, which led him into bitter controversy with some of his contemporaries, especially Timothy A. Conrad. Simpson (1900) correctly dated them from their actual dates of publication. He made a few errors, which have been corrected. These are mostly of bibliographic interest and do not involve priority. Correct dates of issue of the publications of the Academy are found in An Index of the Scientific Contents of the Journal and Proceedings of the Academy of Natural Sciences of Philadelphia (1913, Published in Commemoration of the Centenary of the Academy).

Lea often gave several localities where his new taxa were found, as well as the name of the collectors, in his brief descriptions, and did not select types, but he always gave measurements of a single specimen in his preliminary descriptions and later figured these specimens. In lieu of the word 'type' under article 73 (b) Int. Code Zool. Nomen. (1964) this is an "equivalent expression" and these specimens are regarded as holotypes.

## ACKNOWLEDGEMENTS

Special thanks are extended to Drs. Joseph Rosewater, Joseph P. E. Morrison and Harald A. Rehder of the National Museum of Natural History, who, over the years, have been most liberal in allowing me access to the unionid types in their charge. While he is long deceased, thanks are due to William B. Marshall who, following Charles T. Simpson, continued the work of locating Lea's figured types and left a card catalogue of most of those found in the National Museum.

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- References to these volumes, which are repaged reprints, from the Trans. Amer. Philos. Soc. and the Jour. Acad. Nat. Sci. Phila., are given in the text of this paper. Since most of the volumes do not have dated title pages, these data are collected here: 1, 1834; 2, 1836; 3, 1842; 4, 1848; 5, 1852; 6 (1) 1857, (2) 1858; 7 (1), (2) 1860; 8 (1) 1860, (2) 1862; 9, 1863; 10, 1863; 11, 1867; 12, 1869; 13, 1874.
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# RECENT AND FOSSIL TAXA OF UNIONACEA AND MUTELACEA INTRODUCED

By ISAAC LEA

The following list is arranged alphabetically by species, giving the year and place of publication of the original description, the type locality (references to the original collector or collectors are included only if this information explains why the type is not in the National Museum, or if the figured type is lost), the publication in which the species was first illustrated, and references to the Observations on the Genus Unio. (Since only the page numbers were changed from the preceeding publication, plate and figure references are not included). Finally, there follows the location of the figured holotype. References to syntypes and quasi-authentic material are included only if the figured type could not be located.

All locality data, contained in brackets, are additions to already published records and are from original labels or modern atlases.

The following abbreviations have been used in this list:

AMNH -- American Museum of Natural History, New York,  
New York

ANSP -- Academy of Natural Sciences of Philadelphia,  
Pennsylvania

BMNH -- British Museum (Natural History)

JANSP -- Journal of the Academy of Natural Sciences of  
Philadelphia

MCZ -- Museum of Comparative Zoology, Cambridge,  
Massachusetts

PANSP -- Proceedings of the Academy of Natural Sciences  
of Philadelphia

PAPS -- Proceedings of the American Philosophical Society

TAPS -- Transactions of the American Philosophical Society

USNM -- National Museum of Natural History, Washington, D.C.

abbevillensis Lea, Unio: 1857, PANSP 9: 84 (Abbeville District [Savannah River drainage], South Carolina); 1858, JANSP (2) 4: 51, pl. 6, fig. 34; 1858, Obs. 6: 51. Figured holotype USNM 85583.

aberrans Lea, Unio: 1863, PANSP 15: 191 (Neuse River, 6 mi E Raleigh, [Wake Co.], North Carolina); 1866, JANSP (2) 6: 7, pl. 1, fig. 3; 1867, Obs. 11: 11. Figured holotype USNM 85600.

ablatus Lea, Unio: see under; oblatus Lea, Unio.

acuens Lea, Unio: 1871, PANSP 23: 190 (Holston [Tennessee] River, Concord [Knox Co.], Tennessee); 1874, JANSP (2) 8: 27, pl. 8, fig. 24; 1874, Obs. 13: 31. Figured holotype USNM 84599.

acutirostris Lea, Unio: 1866, PANSP 18: 34 (South America); 1868, JANSP (2) 6: 270, pl. 35, fig. 84; 1869, Obs. 12: 30. Known only from the figured holotype USNM 85930.

acutissimus Lea, Unio: 1831, TAPS 4: 89, pl. 10, fig. 18 (Alabama River; Tait). 1834, Obs. 1: 99. Type [lost].

aequatus Lea, Unio: 1857, PANSP 9: 170 (Buckhead Creek, Burke Co., Georgia); 1858, JANSP (2) 4: 89, pl. 19, fig. 69; 1858, Obs. 6: 89. Figured holotype USNM 85561.

- aethiops Lea, Unio: 1860, PANSP 12: 91 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 377, pl. 41, fig. 285; 1863, Obs. 10: 13. Known only from the figured holotype USNM 85617.
- afferula Lea, Unio: 1864, PANSP 16: 109 (Lake Nyassa, Central Africa). Changed to:
- afferulus Lea, Unio: 1866, JANSP (2) 6: 34, pl. 13, fig. 34; 1867, Obs. 11: 38. Known only from the figured holotype USNM 84058.
- affinis Lea, Unio: 1852, TAPS 10: 271, pl. 19, fig. 26 ([Red River], Alexandria [Rapides Parish], Louisiana); 1852, Obs. 5: 27. Known only from the figured holotype USNM 84910.
- africanus Lea, Unio: 1856, PANSP 8: 94 (Cape of Good Hope); 1857, JANSP (2) 3: 300, pl. 27, fig. 115; 1857, Obs. 6: 20. Figured holotype USNM 85233.
- aheneus Lea, Unio: 1843, Desc. Twelve Uniones (Black Creek, Florida); 1846, TAPS 9: 280, pl. 41, fig. 9; 1848, Obs. 4: 38. Figured holotype USNM 86030.
- alabamensis Lea, Margaritana: 1861, PANSP 13: 41 (Talladega Creek, [Talladega Co.], Alabama); 1861, JANSP (2) 5: pl. 16, fig. 249; 1862, Obs. 8: 108. Known only from the figured holotype USNM 86262.

alata Lea, Spatha: 1864, PANSP 16: 109 (Lake Nyassa, Central Africa); 1866, JANSP (2) 6: 35, pl. 12, fig. 31; 1867, Obs. 11: 39. Known only from the figured holotype USNM 86776.

alatoides Lea, Unio: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.] New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31521. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J., p. 249, pl. 33, figs. 3, 4, pl. 34, fig. 6. Is Proptera alata (Say).

amabilis Lea, Unio: 1865, PANSP 17: 89 ([Flint River], Butler, Taylor Co., Georgia); 1868, JANSP (2) 6: 257, pl. 31, fig. 72; 1869, Obs. 12: 17. Figured holotype USNM 84573.

amazonensis Lea, Anodonta: 1860, PANSP 12: 89 (Upper Amazon, Brazil); 1863, JANSP (2) 5: 395, pl. 46, fig. 300; 1863, Obs. 10: 31. Figured holotype USNM 86724.

amoenus Lea, Unio: 1840 PAPS 1: 286 (Holston River, Tennessee); 1842, TAPS 8: 200, pl. 10, fig. 12; 1842, Obs. 3: 38. Known only from the figured holotype USNM 85070.

- ampullaceus Lea, Unio: 1866, PANSP 18: 34 (South America);  
1868, JANSF (2) 6: 269, pl. 35, fig. 83; 1869, Obs. 12:  
29. Known only from the figured holotype USNM 85614.
- ampulus Lea, Unio: 1872, PANSP 24: 157 (Irwins Creek, Mecklen-  
burg Co., North Carolina); 1874, JANSF (2) 8: 39, pl. 13,  
fig. 36; 1874, Obs. 13: 43. Figured holotype USNM 85591.
- amygdalum Lea, Unio: 1843, Desc. Twelve Uniones (Lake George,  
Florida); 1846, TAPS 9: 275, pl. 39, fig. 1; 1848, Obs.  
4: 33. Figured holotype USNM 86127.
- anaticulus Lea, Unio: 1861, PANSP 13: 40 ([Tombigbee River]  
near Columbus [Lowndes Co.], Mississippi); 1861, JANSF  
(2) 5: 92, pl. 13, fig. 240; 1862, Obs. 8: 96. Figured  
holotype USNM 84735.
- andersonensis Lea, Unio: 1872, PANSP 24: 155 (Holston River;  
and Clinch River, Anderson Co.; both Tennessee); 1874,  
JANSF (2) 8: 36, pl. 12, fig. 33; 1874, Obs. 13: 40.  
Figured holotype USNM 84691 from the former locality.
- angulata Lea, Anodonta: 1838, TAPS 6: 96, pl. 16, fig. 52  
(Lewis River [Clarke and Cowlitz Cos.], Washington);  
1838, Obs. 2: 79. Figured holotype USNM 86759, consists  
of a single broken valve.

angustatus Lea, Unio: 1831, TAPS, 4: 114, pl. 17, fig. 43; 1834, Obs. 1: 124 (Cooper River, South Carolina). Figured holotype USNM 85896.

anodontoides Lea, Unio: 1831, TAPS 4: 81, pl. 8, fig. 11; 1834, Obs. 1: 91 (Mississippi River, Robeson; Alabama River, Tait; Ohio River, Taylor). Figured type [lost]; syntype mentioned as in the ANSP [lost].

anthonyi Lea, Unio: 1861, PANSP 13: 41 (Florida); 1862, JANSP (2) 5: 197, pl. 27, fig. 266; 1863, Obs. 9: 19. Known only from the figured holotype USNM 84986.

apicinus Lea, Unio: 1857, PANSP 9: 32 (Oothcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 76, pl. 14, fig. 56; 1858, Obs. 6: 76. Known only from the figured type, USNM [lost].

appressus Lea, Unio: 1871, PANSP 23: 189 ([Tennessee River], Tuscumbia [Colbert Co.], Alabama; Tennessee River; Holston River, [Tennessee]); 1874, JANSP (2) 8: 12, pl. 3, fig. 8; 1874, Obs. 13: 16. Figured holotype USNM 84483.

apprimus Lea, Unio: 1866, PANSP 18: 34 (South America); 1868, JANSP (2) 6: 263, pl. 33, fig. 78; 1869, Obs. 12: 23. Known only from the figured holotype USNM 85167.



- approximus Lea, Unio: 1845, PAPS 4: 164 (Red River, Alexandria [Rapides Parish], Louisiana); 1848, TAPS 10: 74, pl. 5, fig. 13: 1848, Obs. 4: 48. Figured holotype USNM 85017.
- aquilus Lea, Unio: 1857, PANSP 9: 172 (Flint River, Macon [County]; Chattahooche River, Roswell [Milton Co.]; both Georgia); 1858 JANSF (2) 4: 92, pl. 20, fig. 72; 1858, Obs. 6: 92. Figured holotype USNM 85993 from the former locality.
- aratus Lea, Unio: 1843, Desc. Twelve Uniones (Central America); 1846, TAPS 9: 282, pl. 42, fig. 12; 1848, Obs. 4: 40. Possible type USNM 84395.
- arcaiformis Lea, Unio: 1831, TAPS 4: 116, pl. 17, fig. 44 (Tennessee River; Vanuxem and Cooper); 1834, Obs. 1: 126. Type [lost]; 2 specimens USNM 84422, subsequently identified by Lea from G. White.
- arctior Lea, Unio: 1838, TAPS 6: 10, pl. 4, fig. 10 (Ohio River, near Cincinnati [Hamilton Co.], Ohio); 1838, Obs. 2: 10. Figured holotype USNM 86103.
- arcula Lea, Margaritana: 1838, TAPS 6: 71, pl. 22, fig. 69 (Altamaha [River], Liberty [now Long] Co., Georgia; 1838, Obs. 2: 71. Figured holotype USNM 86170.
- argentea Lea, Anodonta: 1840, PAPS 1: 289 (Stone's River, Tennessee); 1842, TAPS 8: 223, pl. 19, fig. 41; 1842, Obs. 3: 61. Figured holotype USNM 86538.

argenteus Lea, Unio: 1841, PAPS 2: 82 (Holston River, East Tennessee); 1842, TAPS 8: 242, pl. 25, fig. 57; 1842, Obs. 3: 80. Known only from the figured holotype USNM 84778.

arkansasensis Lea, Unio: 1862, PANSP 14: 169 ([Ouachita River] near Hot Springs, [Garland Co.], Arkansas); 1862, JANSP (2) 5: 206, pl. 30, fig. 275; 1863, Obs. 9: 28. Known only from the figured holotype USNM 25710.

arkansensis Lea, Anodonta: 1852, TAPS 10: 293, pl. 29, fig. 56 (Little Arkansas River, where the road to Santa Fé crosses it [Sedgwick Co.], Kansas); 1852, Obs. 5: 49. Known only from the figured holotype USNM 86603.

asper, Lea, Unio: 1831, TAPS 4: 85, pl. 9, fig. 15 (Alabama River); 1834, Obs. 1: 95. Syntype USNM 84212, marked as the type, but it does not exactly agree with the figure.

asperatus Lea, Unio: 1861, PANSP 13: 41 (Alabama River, Claiborne [Monroe Co.], Alabama; Coosa River, Alabama); 1861, JANSP (2) 5: 68, pl. 7, fig. 218; 1862, Obs. 8: 72. Figured holotype USNM 84272 from the former locality.

asperrimus Lea, Unio: 1831, TAPS 4: 71, pl. 5, fig. 3 (Ohio River); 1834, Obs. 1: 81. Figured holotype USNM 84174.

asperulus Lea, Unio: 1866, PANSP 18: 133 (Siam); 1868, PANSP (2) 6: 280, pl. 38, fig. 94; 1869, Obs. 12: 40. Figured holotype USNM 84078.

ater Lea, Unio: 1829. TAPS 3: 426, pl. 7, fig. 9 (Mississippi River, below Natchez [Adams Co. Mississippi]); 1834, Obs. 1: 40. Figured type not located, syntype USNM 86108.

atrocostatus Lea, Unio: 1845, PAPS 4: 64 ([Alabama River], Claiborne [Monroe Co.], Alabama; [Black Warrior River], Tuscaloosa, [Tuscaloosa Co.], Alabama; [Red River], Alexandria, [Rapides Parish], Louisiana); 1848, TAPS 10: 70, pl. 2, fig. 5; 1848, Obs. 4: 44. Figured holotype USNM 84015 from the third locality.

atromarginatus Lea, Unio: 1840, PAPS 1: 288 (Chattahoochee River, Columbus [Muscogee Co.], Georgia, Boykin [2 examples]); 1842, TAPS 8: 207, pl. 13, fig. 21; 1842, Obs. 3: 45. Type may be USNM 83977 which differs slightly from the figure.

attenuatus Lea, Unio: 1872, PANSP 24: 157 (Savannah River; Beaver Creek [a few mi. E Bonaire, Ocmulgee River drainage] Houston Co., Georgia); 1874, JANSP (2) 8: 41, pl. 14, fig. 38; 1874, Obs. 13: 45. Figured holotype USNM 85974 from the latter locality.

- aureus Lea, Unio: 1859, PANSP 11: 112 (Texas); 1862, JANSP (2) 5: 195, pl. 26, fig. 264; 1863, Obs. 9: 17. Known only from the figured holotype USNM 84572.
- averyi Lea, Unio: 1859, PANSP 11: 281 (Chummagua River, Isthmus of Darien [Panama]); 1860, JANSP (2) 4: 269, pl. 44, fig. 149; 1860, Obs. 7: 87. Figured holotype USNM 84385.
- bairdianus Lea, Unio: 1857, PANSP 9: 102 (Devils River, [Valverde Co.], Texas); 1860, JANSP (2) 4: 361, pl. 61, fig. 186; 1860, Obs. 8: 43. Figured type not in the USNM [lost]. Listed as in the collections of Lea, USNM and Anthony, not in the MCZ [lost].
- baldwinensis Lea, Unio: 1859, PANSP 11: 170 (Carter's Creek, Baldwin Co., Georgia) ; 1860, JANSP (2) 4: 330, pl. 51, fig. 155; 1860, Obs. 8: 12. Figured holotype USNM 85420.
- barnesianus Lea, Unio: 1838, TAPS 6: 31, pl. 10, fig. 26 (Cumberland River, Tennessee); 1838, Obs. 2: 31. Figured holotype USNM 84586.
- barrattii Lea, Unio: 1852, TAPS 10: 256, pl. 13, fig. 5 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 12. Figured holotype USNM 86010.

basalis Lea, Unio: 1872, PANSP 24: 161 (Carters Creek, near Columbus [Muscogee Co.], Georgia); 1874, JANSP (2) 8: 48, pl. 16, fig. 46; 1874, Obs. 13: 52. Figured holotype USNM 85703.

beadleianus Lea, Unio: 1861, PANSP 13: 39 (Pearl River, Jackson [Hinds Co.], Mississippi); 1861, JANSP (2) 5: 94, pl. 14, fig. 242; 1862, Obs. 8: 98. Figured type not in the USNM; syntype USNM 85746; syntype ANSP 41638 from Lea.

bealei Lea, Anodonta: 1863, PANSP 15: 194 (Leon Co.; Verdigris River; both Texas); 1866, JANSP (2) 6: 26, pl. 9, fig. 25; 1867, Obs. 11: 30. Figured holotype USNM 86690 from the former locality.

bealei Lea, Unio: 1862, PANSP 14: 169 (Leon Co.; [Colorado River], Ruetersville, [Fayette Co.]; both Texas); 1862, JANSP (2) 5: 204, pl. 30, fig. 273; 1863, Obs. 9: 26. Figured holotype USNM 85305 from the former locality.

beaverensis Lea, Unio: 1868, PANSP 20: 161 (Beaver Creek [Gaston Co.]; Long Creek [Gaston Co.]; both North Carolina. Carters Creek, [Baldwin Co.], Georgia); 1868, JANSP (2) 6: 297, pl. 44, fig. 109; 1869, Obs. 12: 57. Figured holotype USNM 85598 from the first locality.

bellulus Lea, Unio: 1872, PANSP 24: 161 (Holston River; Tennessee River; Tennessee River, Mussel Shoals [Colbert and Lauderdale Cos.], Alabama); 1874, JANSP (2) 8: 50, pl. 17, fig. 48; 1874, Obs. 13: 54. Figured holotype USNM 84772 from the third locality.

benedictensis Lea, Symphynota: 1834, TAPS 5: 104, pl. 16, fig. 48 (Lake Champlain [Vermont]); 1834, Obs. 1: 216. Figured holotype USNM 86381.

bengalensis Lea, Unio: 1838, TAPS 6: 3, pl. 2, fig. 3 (Bengal; Burrough); 1838, Obs. 2: 3. Figured holotype Burrough colln. in the ANSP [lost].

berlandierii Lea, Unio: 1857, PANSP 9: 101 ([Rio Grande River] Matamoras, [Tamaulipas State], Mexico; Colorado River, Texas); 1860, JANSP (2) 4: 369, pl. 65, fig. 194; 1860, Obs. 8: 51. Figured holotype USNM 84427 from the former locality.

bialata Lea, Symphynota: 1829, TAPS 3: 445, pl. 14, fig. 24 (Fresh waters of the South of Asia [Canton, China]); 1834, Obs. 1: 59. Figured holotype USNM 86356.

biangulatus Lea, Unio: 1840, PAPS 1: 288 (Caney Fork [of the Cumberland River], Tennessee); 1842, TAPS 8: 197, pl. 9, fig. 8; 1842, Obs. 3: 35. Figured holotype USNM 86120.

- biemarginatus Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River], Florence [Lauderdale Co.], Alabama); 1866, JANSP (2) 6: 47, pl. 16, fig. 45; 1867, Obs. 11: 51. Figured holotype USNM 84608.
- bigbyensis Lea, Unio: 1841, PAPS 2: 30 (Big Bigby Creek, Maury Co., Tennessee); 1842, TAPS 8: 237, pl. 22, fig. 51; 1842, Obs. 3: 75. Figured holotype USNM 84579.
- bilineata Lea, Symphynota: 1831, TAPS 4: 98, pl. 11, fig. 19 (River Hoogley [about 100 mi above Calcutta] Hindostan); 1834, Obs. 1: 108. Figured type not in the USNM; syntypes ANSP 41876 and 41878 mentioned by Lea as in the ANSP.
- binneyi Lea, Unio: 1845, PAPS 4: 165 (Southern states, probably Alabama; South America, teste Simpson, 1900, PUSNM 22: 878); 1848, TAPS 10: 77, pl. 6, fig. 18; 1848, Obs. 4: 51. Known only from the figured holotype USNM 85170.
- bisselianus Lea, Unio: 1867, PANSP 19: 81 (Bissels Pond, Charlotte [Mecklenburg Co.], North Carolina); 1868, JANSP (2) 6: 277, pl. 37, fig. 90; 1869, Obs. 12: 37. Figured holotype USNM 85373.
- blainvilliana Lea, Anodonta: 1834, TAPS 5: 77, pl. 12, fig. 35 (Chili); 1834, Obs. 1: 189. Figured type not in the USNM; specimens identified by Lea, ANSP 41827.

blaudianus Lea, Unio: 1856, PANSP 8: 263 (Othcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 65, pl. 11, fig. 47; 1858, Obs. 6: 65. Figured holotype USNM 84190.

blaudingianus Lea, Unio: 1834, TAPS 5: 101, pl. 14, fig. 44 (St. Johns River ? Florida); 1834, Obs. 1: 213. Figured holotype USNM 85715.

bourguignatianus Lea, Unio: 1863, PANSP 15: 189 (Tigris River, Mosul [Al Mawsil, Iraq]); 1866, JANSP (2) 6: 54, pl. 18, fig. 51; 1867, Obs. 11: 58. Figured holotype USNM 84731.

bournianus Lea, Unio: 1840, PAPS 1: 288 (Scioto River, near Chillicothe [Ross Co.], Ohio); 1842, TAPS 8: 213, pl. 15, fig. 28; 1842, Obs. 3: 51. Figured holotype USNM 84683.

boydianus Lea, Unio: 1840, PAPS 1: 286 (Oak Orchard Creek, Orleans Co., New York); 1842, TAPS 8: 216, pl. 16, fig. 32; 1842, Obs. 3: 54. Figured holotype USNM 86126.

boykinianus Lea, Unio: 1840, PAPS 1: 288 (Chattahoochee River, Columbus [Muscogee Co.], Georgia; Boykin); 1842, TAPS 8: 208, pl. 13, fig. 22; 1842, Obs. 3: 46. Type [lost]; specimen USNM 83903, subsequently identified by Lea from Hallenbeck.



- brazosensis Lea, Unio: 1868, PANSP 20: 144 ([Trinity River Dallas Co.; Brazos River; both Texas); 1868, JANSP (2) 6: 309, pl. 48, fig. 122; 1869, Obs. 12: 69. Figured holotype USNM 84110 from the latter locality.
- brevidens Lea, Unio: 1831, TAPS 4: 75, pl. 6, fig. 6 (Cumberland River, Tennessee [teste Errata sheet]; Lyceum Nat. Hist. New York); 1834, Obs. 1: 85. Type [lost]; specimen USNM 85349 subsequently identified by Lea from Troost.
- brevis Lea, Unio: 1872, PANSP 34: 157 (Conasauga Creek, Monroe Co., East Tennessee); 1874, JANSP (2) 8: 35, pl. 12, fig. 32; 1874, Obs. 13: 39. Figured holotype USNM 84546.
- bridgesii Lea, Anodonta: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSP (2) 6: 291, pl. 42, fig. 104; 1869, Obs. 12: 51. Figured holotype USNM 86691.
- brownianus Lea, Unio: 1838, TAPS 6: 108, pl. 24, fig. 116 (River Amazon [Brazil]); 1838, Obs. 2: 108. Figured holotype USNM 83883.
- brownii Lea, Unio: 1856, PANSP 8: 95 (Mocha? Arabia? [Probably South America, teste Simpson); 1857, JANSP (2) 6: 27, pl. 29, fig. 22; 1857, Obs. 6: 27. Known only from the figured holotype USNM 86124.
- brumleyanus Lea, Unio: 1841, PAPS 2: 82 ([Black] Warrior River, Tuscaloosa [Tuscaloosa Co.], Alabama, Griffith). Changed to:

brumbvanus Lea Unio: 1842, TAPS 8: 245, pl. 25, fig. 62; 1842, Obs. 3: 83. Known only from the figured type; returned to Griffith [lost].

buchanensis Lea, Anodonta: 1838, TAPS 6: 47, pl. 14, fig. 43  
(Buck Creek, [not located] Ohio); 1838: Obs. 2: 47.  
Figured holotype USNM 86719.

buckleyi Lea, Unio: 1843, Desc. Twelve Uniones (Lake George and Lake Monroe, Florida); 1846, TAPS 9: 276, pl. 39, fig. 2; 1848, Obs. 4: 34. Figured holotype USNM 85236 from the former locality.

buddianus Lea, Unio: 1843, Desc. Twelve Uniones (Lake George and Lake Monroe, Florida); 1846, TAPS 9: 277, pl. 40, fig. 5; 1848, Obs. 4: 35. Figured holotype USNM 85606 from the former locality.

bulbosus Lea, Unio: 1857, PANSP 9: 172 (Flint River, near Macon [County] Georgia); 1859, JANSP (2) 4: 191, pl. 21, fig. 75; 1859, Obs. 7: 9. Figured holotype USNM 84715.

bulloides Lea, Unio: 1859, PANSP 11: 187 (Rio de la Plata [Argentina]); 1860, JANSP (2) 4: 264, pl. 42, fig. 144; 1860, Obs. 7: 82. Figured holotype USNM 85776.

burkensis Lea, Unio: 1859, PANSP 11: 112 (Buckhead Creek, Burke Co., Georgia); 1859, JANSP (2) 4: 215, pl. 27, fig. 95; 1859, Obs. 7: 33. Figured holotype USNM 85998.

- burroughiana Lea, Anodonta: 1834, TAPS 5: 105, pl. 16, fig. 49  
(Island of Luconia, near Manilla [Philippine Islands];  
Burrough); 1834, Obs. 1: 217. Figured type not in the  
USNM or ANSP [lost].
- burroughianus Lea, Unio: 1834, TAPS 5: 67, pl. 10, fig. 27  
(River Parana, Province of Corrientes [Argentina];  
Burrough); 1834, Obs. 1: 179. Figured holotype ANSP 41796.
- buxeus Lea, Unio: 1852, TAPS 10: 261, pl. 15, fig. 13 (Abbeville  
District [Savannah River drainage], South Carolina); 1852,  
Obs. 5: 17. Figured holotype USNM 85153.
- cacao Lea, Unio: 1859, PANSP 11: 154 (Chocktahatchie [Chocta-  
whatchee] River, West Florida); 1860, JANSP (2) 4: 344,  
pl. 56, fig. 169; 1860, Obs. 8: 26. Known only from the  
figured holotype USNM 85724.
- caeruleus Lea, Unio: 1831, TAPS 4: 95, pl. 13, fig. 25  
(River Hoogley, Hindostan); 1834, Obs. 1: 105; Figured  
holotype USNM 85193.
- cahabensis Lea, Unio: 1871, PANSP 23: 190 (Cahaba River,  
Shelby Co., Alabama); 1874, JANSP (2) 8: 17, pl. 5, fig.  
14; 1874, Obs. 13: 21. Figured holotype USNM 84204.
- cailliaudii Lea, Anodonta: 1860, PANSP 12: 308 (Brazil);  
1863, JANSP (2) 5: 395, pl. 45, fig. 297; 1863, Obs.  
10: 31. Known only from the figured holotype USNM 86705.

- calceolus Lea, Unio: 1828, TAPS 3: 265, pl. 3, fig. 1 (Ohio);  
1834, Obs. 1: 7. Possible type USNM 86261.
- caldwellii Lea, Unio: 1858, PANSP 10: 118 (Isthmus of Darien  
[Panama]); 1860, JANSP (2) 4: 265, pl. 43, fig. 145;  
1860, Obs. 7: 83. Figured holotype USNM 84396.
- californiensis Lea, Anodonta: 1852, TAPS 10: 286, pl. 25,  
fig. 47 (Colorado River, California); 1852, Obs. 5: 42.  
Figured holotype USNM 86393.
- caliginosus Lea, Unio: 1845, PAPS 4: 165 (Red River, Alexandria  
[Rapides Parish], Louisiana); 1848, TAPS 10: 79, pl. 7,  
fig. 21; 1848, Obs. 4: 53. Figured holotype USNM 85108.
- callosus Lea, Unio: 1841, PAPS 2: 31 (Ohio Canal, 12 mi.  
below Columbus, Ohio; Jay [is a Mexican shell teste  
Simpson]); 1842, TAPS 8: 239, pl. 23, fig. 54; 1842,  
Obs. 3: 77. Known only from the figured type, not in the  
USNM or AMNH [lost].
- cambodiensis Lea, Unio: 1856, PANSP 8: 103 (Tackrong River,  
Korat, Cambodia); 1857, JANSP (2) 3: 313, pl. 30, fig.  
28; 1857, Obs. 6: 33. Figured holotype USNM 84909.
- camelopardilis Lea, Unio: 1860, PANSP 12: 92 (North Alabama);  
1860, JANSP (2) 4: 355, pl. 59, fig. 180; 1860, Obs. 8:  
37. Figured holotype USNM 85662.

- camelus Lea, Unio: 1834, TAPS 5: 102, pl. 15, fig. 45 (Ohio River); 1834, Obs. 1: 214. Figured holotype USNM 84486.
- canadensis Lea, Unio: 1857, PANSP 9: 85 (St. Lawrence River, near Montreal, [Quebec, Canada]; 1860 JANSP (2) 4: 268, pl. 44, fig. 148; 1860, Obs. 7: 86. Figured holotype USNM 84503.
- caperatus Lea, Unio: 1845, PAPS 4: 164 (Clinch River, Tennessee); 1848, TAPS 10: 75, pl. 5, fig. 14; 1848, Obs. 4: 49. Figured holotype USNM 84305.
- capillaris Lea, Unio: 1834, TAPS 5: 29, pl. 2, fig. 2; 1834, Obs. 1: 141 (Ohio). Figured type USNM [lost]; syntype ANSP [lost]. Known only from these two specimens. USNM 84602 is a larger, subsequently identified, specimen.
- capsaeformis Lea, Unio: 1834, TAPS 5: 31, pl. 2, fig. 4 (Cumberland River, [Tennessee]; W. Cooper); 1834, Obs. 1: 143. Figured holotype MCZ 178570 from W. Cooper.
- carbonarius Lea, Unio: 1838, TAPS 6: 37, pl. 11, fig. 32 (River Medellin, Mexico); 1838, Obs. 2: 37. Figured holotype USNM 84080a.

carolinensis 'Ravenel' Lea, Unio: 1838, TAPS 6: 5; 1838, Obs.

2: 5 [nomen nudum]. MS name of Ravenel non Unio carolinensis Bosc 1824. Listed under the synonymy of vaughanianus Lea, Unio.

carriosoides Lea, Unio: 1886, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31517, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J., p. 247, pl. 32, fig. 3. Is Lampsilis cariosa (Say).

castaneus Lea, Unio: 1831, TAPS 4: 91, pl. 11, fig. 21 (Alabama River); 1834, Obs. 1: 101. Figured holotype USNM 84824.

castus Lea, Unio: 1860, PANSP 12: 306 (South Carolina); 1860, JANSP (2) 4: 349, pl. 57, fig. 174; 1860, Obs. 8: 31. Known only from the figured holotype USNM 84782.

catawbensus Lea, Unio: 1861, JANSP (2) 5: 54; 1861, Obs. 8: 58. New name for Unio wheatleyi Lea, erroneously thought to be preoccupied by Anodonta wheatlevi Lea 1857.

charlottensis Lea, Unio: 1863, PANSP 15: 191 ([Sugar Creek], near Charlotte, Mecklenberg Co., North Carolina); 1866, JANSP (2) 6: 8, pl. 2, fig. 5; 1867, Obs. 11: 12. Known only from the figured holotype USNM 85402.

chathamensis Lea, Unio: 1863, PANSP 15: 191 (Rocky Run, Chatham Co., North Carolina; James River near Richmond, [Henrico Co.], Virginia); 1866, JANSP (2) 6: 21, pl. 6, fig. 19; 1867, Obs. 11: 25. Figured holotype USNM 85672 from the former locality.

chattanoogaensis Lea, Unio: 1858, PANSP 10: 166 ([Tennessee River] Chattanooga [Marion Co.], Tennessee; Etowah, Coosawattee and Oostenaula Rivers; all Georgia); 1859, JANSP (2) 4: 209, pl. 25, fig. 90; 1859, Obs. 7: 27. Figured holotype USNM 84729.

chickasawhensis Lea, Unio: 1861, PANSP 13: 39 (Chickasawha[y] River [Wayne and Greene Cos.], Mississippi); 1861, JANSP (2) 5: 101, pl. 16, fig. 250; 1862, Obs. 8: 105. Known only from the figured holotype USNM 85759.

chinensis Lea, Unio: 1868, PANSP 20: 150 (Hong Kong, China); 1868, JANSP (2) 6: 325, pl. 53, fig. 138; 1869, Obs. 12: 85. Known only from the figured holotype MCZ 175567 from J. G. Anthony.

chunii Lea, Unio: 1861, PANSP 13: 392 ([Trinity River], Dallas, [Dallas Co.], Texas); 1862, JANSP (2) 5: 196, pl. 27, fig. 265; 1863, Obs. 9: 18. Figured holotype USNM 84636.

- cicur Lea, Unio: 1861, PANSP 13: 39 (Little Ocmulgee River, Georgia); 1861, JANSP (2) 5: 93, pl. 13, fig. 241; 1862, Obs. 8: 97. Known only from the figured holotype USNM 85532.
- cincinnatiensis Lea, Unio: 1840, PAPS 1: 285 (Ohio River, Cincinnati [Hamilton Co., Ohio]); 1842, TAPS 8: 194, pl. 8, fig. 4; 1842, Obs. 3: 32. Figured holotype USNM 84199.
- cinnamomicus Lea, Unio: 1861, PANSP 13: 39 (Tombigbee River, Columbus, [Lowndes Co.], Mississippi); 1862, Obs. 8: 104. Figured holotype USNM 85317.
- circulus Lea, Unio: 1829, TAPS 3: 433, pl. 9, fig. 14 (Ohio [River], Cincinnati, [Ohio]; Monongahela [River], Pittsburg, [Pennsylvania]; Tennessee [River], Nashville, [Tennessee]); 1834, Obs. 1: 47. Figured type not in the USNM [lost]; syntype ANSP 56602 mentioned as in the ANSP.
- circumactus Lea, Unio: 1871, PANSP 23: 192 ([Tennessee River] Florence, [Lauderdale Co.], Alabama; Holston River [Tennessee]); 1874, JANSP (2) 8: 14, pl. 4, fig. 11: 1874, Obs. 13: 19. Figured holotype USNM 85830 from the latter locality.



cirratus Lea, Unio: 1874, PANSP for 1873, 25: 422 (Abbeville District, [Savannah River drainage] South Carolina); 1874, JANSF (2) 8: 55, pl. 19, fig. 53; 1874, Obs. 13: 59.

Figured holotype USNM 85584.

cistellaeformis Lea, Unio: 1863, PANSP 15: 193 (Neuse River near [6 mi E] Raleigh [Wake Co.], North Carolina); 1866, JANSF (2) 6: 19, pl. 5, fig. 17; 1867, Obs. 11: 23.

Figured holotype USNM 85533.

claibornensis Lea, Unio: 1838, TAPS 6: 105, pl. 24, fig. 115 (Alabama River, Claiborne [Monroe Co., Alabama]); 1838, Obs. 2: 105. Figured holotype USNM 85020.

clarkianus Lea, Unio: 1852, TAPS 10: 273, pl. 21, fig. 30 ([Duck River] Williamsport [Maury Co.], Tennessee; Georgia or Alabama, Wheatley); 1852, Obs. 5: 29. Figured type not in the USNM [lost]; syntype ANSP 126052 from the latter locality, mentioned as in the Wheatley colln.

clinchensis Lea, Unio: 1867, PANSP 19: 81 (Clinch River; French Broad River; both Tennessee); 1868, JANSF (2) 6: 278, pl. 37, fig. 91; 1869, Obs. 12: 38. Figured holotype USNM 84596 from the former locality.

coccineus Lea, Unio: 1838, TAPS 6: 12, pl. 5, fig. 12 (Ohio River, near Marietta [Washington Co.]; Mahoning River; [Scioto River], near Columbus [Franklin Co.]; all Ohio); 1838, Obs. 2: 12. Figured type from the first locality [lost]. Non Conrad 1836. Is Quadrula catilla Conrad, teste Frierson, 1927, Check List Naiades N. America, p. 54.

coelestis Lea, Iridina: 1838, TAPS 6: 82, pl. 22, fig. 70 (Africa); 1838, Obs. 2: 82. Type lost. Listed as in Lea and Jay collns. but not found in the USNM or AMNH. cognatus Lea, Unio: 1860, PANSP 12: 306 (Rio Salado, New [Nuevo] Leon [State], Mexico); 1860, JANSP (2) 4: 368, pl. 65, fig. 193; 1860, Obs. 8: 50. Known only from the figured holotype USNM 85004 which consists of a single left valve.

coloradoensis Lea, Unio: 1856, PANSP 8: 103 (Rio Colorado, Texas); 1857, JANSP (2) 3: 314, pl. 31, fig. 29; 1857, Obs. 6: 34. Figured holotype USNM 84845.

columbensis Lea, Margaritana: 1867, PANSP 19: 81 (Tombigbee River, near Columbus [Lowndes Co.], Mississippi). Type not in the USNM [lost].

columbensis Lea, Unio: 1857, PANSP 9: 31 (creeks near Columbus [Muscogee Co.], Georgia); 1858, JANSP (2) 4: 75, pl. 14, fig. 55; 1858, Obs. 6: 75. Figured holotype USNM 85360.

Columbia Lea, Genus: 1834, TAPS 5:78, Type species: Anodonta blainvilliana Lea, by monotypy. Non Columbia Linnaeus (Aves) 1758. 1834, Obs. 1: 190.

compactus Lea, Unio: 1859, PANSP 11: 154 (Etowah and Conna-sauga Rivers; both Georgia); 1859, JANSP (2) 4: 218, pl. 28, fig. 98; 1859, Obs. 7: 36. Figured holotype USNM 84447 from the former locality.

compressa Lea, Monocondylaea: 1863, PANSP 15: 190 (Siam); 1866, JANSP (2) 6: 30, pl. 11, fig. 29; 1867, Obs. 11: 34. Figured holotype USNM 86340.

compressa Lea, Symphynota: 1829, TAPS 3: 450, pl. 12, fig. 22 ([Yellow Creek, near Cincinnati, Hamilton Co.,] Ohio; Norman's Kill, near Albany [Albany Co., New York]); 1834, Obs. 1: 64. Figured holotype USNM 83961 from the former locality.

compressissimus Lea, Unio: 1845, PAPS 4: 163 (Holston River, Tennessee); 1848, TAPS 10: 81, pl. 8, fig. 23; 1848, Obs. 4: 55. Figured holotype USNM 84474.

- conasaugaensis Lea, Unio: 1872, PANSP 24: 155 (Conasauga Creek, Monroe Co., East Tennessee); 1874, JANSPP (2) 8: 32, pl. 10, fig. 30; 1874, Obs. 13: 37. Known only from the figured holotype USNM 85565.
- concavus Lea, Unio: 1852, TAPS 10: 260, pl. 15, fig. 11 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 16. Figured holotype USNM 85154.
- concestator Lea, Unio: 1857, PANSP 9: 31 (creeks near Columbus [Muscogee Co.], Georgia); 1858, JANSPP (2) 4: 66, pl. 12, fig. 48; 1858, Obs. 6: 66. Figured holotype USNM 85102.
- concolor Lea, Unio: 1861, PANSP 13: 40 (Big Prairie Creek [Hale Co.], Alabama); 1861, JANSPP (2) 5: 89, pl. 12, fig. 237; 1862, Obs. 8: 93. Figured holotype USNM 85319.
- confertus Lea, Unio: 1834, TAPS 5: 103, pl. 16, fig. 47 (Santee Canal, South Carolina, Ravenel); 1834, Obs. 1: 215. Type [lost]; subsequently identified topotype USNM 85634.
- congaraeus Lea, Unio: 1831, TAPS 4: 72, pl. 6, fig. 4 (Congaree River, South Carolina); 1834, Obs., 1: 82. Figured holotype USNM 85693.

- connasaugaensis Lea, Margaritana: 1858, PANSP 10: 135  
(Connasauga River, one of the headwaters of the Alabama River, Gilmer Co., Georgia; Tennessee); 1859, JANSP (2) 4: 229, pl. 32, fig. 113; 1859, Obs. 7: 47. Figured holotype USNM 86277 from the former locality.
- conradicus Lea, Unio: 1834, TAPS 5: 63, pl. 9, fig. 23 (no locality [Caney Fork, of the Cumberland River, Tennessee]; 1834, Obs. 1: 175. Figured holotype USNM 84134.
- consanguineus Lea, Unio: 1861, PANSP 13: 60 (Etowah River; Oostenaula River; both Georgia, Cahawba River, Alabama); 1861, JANSP (2) 5: 5, p. 67, pl. 7, fig. 217; 1862, Obs. 8: 71. Figured holotype USNM 84726 from the third locality.
- consobrinus Lea, Unio: 1859, PANSP 11: 331 (China); 1860, JANSP (2) 4: 272, pl. 45, fig. 152; 1860, Obs. 7: 90. Figured holotype USNM 85178.
- conspicuus Lea, Unio: 1872, PANSP 24: 156 (Yadkin River, Salisbury [Rowan Co.], North Carolina); 1874, JANSP (2) 8: 34, pl. 11, fig. 31; 1874, Obs. 13: 38. Figured holotype USNM 85056.

contiguus Lea, Unio: 1861, PANSP 13: 392 (Stewarts Mill Dam, Union Co.), North Carolina); 1862, JANSP (2) 5: 199, pl. 28, fig. 268; 1863, Obs. 9: 21. Known only from the figured holotype USNM 85120.

contorta Lea, Triquetra: 1857, PANSP 8: 300. Unnecessary substitution for lanceolata Lea, Triquetra, under which see.

contractus Lea, Unio: 1857, PANSP 9: 86 (Roanoke River, Wheldon [Halifax Co.], North Carolina); 1862, JANSP (2) 5: 203, pl. 29, fig. 272; 1863, Obs. 9: 25. Figured holotype USNM 86102.

contradens Lea, Unio: 1838, TAPS 6: 75, pl. 18, fig. 58 (no locality [Java]); 1838, Obs. 2: 75. Figured holotype USNM 85185.

cooperianus Lea, Unio: 1834, TAPS 5: 61, pl. 8, fig. 21 (Ohio River; T. G. Lea); 1834, Obs. 1: 173. Type [lost].

copei Lea, Unio: 1868, PANSP 20: 144 (Headwaters of North branch of Holston River, Smyth Co., Virginia); 1868, JANSP (2) 6: 307, pl. 47, fig. 120; 1869, Obs. 12: 67. Figured holotype USNM 85137.

corneus Lea, Unio: 1874, PANSP for 1873, 25: 423 ([Chattahoochee River] Columbus [Muscogee Co.]; Marietta [Cobb Co.]; both Georgia; Abbeville District [Savannah River drainage], South Carolina); 1874, JANSP (2) 8: 59, pl. 20, fig. 58; 1874, Obs. 13: 63. Figured holotype USNM 85580 from the first locality.

corpulentoides Lea, Anodonta: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31525. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J., p. 252, pl. 35, fig. 1. Is Anodonta grandis Say.

corrianus Lea, Unio: 1834, TAPS 5: 65, pl. 9, fig. 25 (India); 1834, Obs. 1: 177. Figured holotype USNM 86056.

corvinus Lea, Unio: 1868, PANSP 20: 144 (Flint River, Georgia; Darien?[sic] [McIntosh Co., Georgia]; Neuse River, Raleigh [Wake Co.], North Carolina); 1868, JANSP (2) 6: 310, pl. 48, fig. 123; 1869, Obs. 12: 70. Figured holotype USNM 85277 from the first locality.

corvunculus Lea, Unio: 1868, PANSP 20: 144 (Swamp Creek, Whitfield Co., Georgia); 1868, JANSP (2) 6: 314, pl. 50, fig. 127; 1869, Obs. 12: 74. Figured holotype USNM 85293.

corvus Lea, Unio: 1859, PANSP 11: 112 (Buckhead Creek, Burke Co.; Ogeechee River; both Georgia); 1859, JANSP (2) 4: 217, pl. 27, fig. 97; 1859, Obs. 7: 35. Figured holotype USNM 84539 from the former locality.

couchianus Lea, Unio: 1860, PANSP 12: 305 (Rio Salado, New [Nuevo] Leon [State], Mexico); 1860, JANSP (2) 4: 371, pl. 66, fig. 196; 1860, Obs. 8: 53. Figured holotype USNM 85728.

cowperiana Lea, Anodonta: 1840, PAPS 1: 289 ([Altamaha River] Hopeton, near Darien [McIntosh Co.], Georgia). Changed to: couperiana Lea, Anodonta: 1842, TAPS 8: 227, pl. 20, fig. 46; 1842, Obs. 3: 65. Figured type [lost]. Lectotype USNM 86673, selected by Johnson 1965, Breviora, Mus. Comp. Zool. no. 213, p. 3, pl. 2, fig. 4.

crapulus Lea, Unio: 1861, PANSP 13: 39 (Etowah River, Georgia); 1866, JANSP (2) 6: 42, pl. 15, fig. 40; 1867, Obs. 11: 46. Figured holotype USNM 84821.

crebrivittatus Lea, Unio: 1861, PANSP 13: 60 (Cossawatee River, Alabama); 1866, JANSP (2) 6: 43, pl. 15, fig. 41; 1867, Obs. 11: **47**. Figured holotype USNM 84725.



crepera Lea, Anodonta: 1850, Proc. Zool. Soc. London, p. 198

(Bongabon, Luzon, Philippine Islands; Cuming); 1860,  
JANSP (2) 4: 238, pl. 34, fig. 117; 1860, Obs. 7: 56.

Figured type not in the BMNH [lost]; syntypes BMNH 1965158  
and USNM 86602.

creperus Lea, Unio: 1838, TAPS 6: 33, pl. 10, fig. 28 (Tennessee);

1838, Obs. 2: 33. Figured holotype USNM 85264 consists of  
the left valve only.

crocatus Lea, Unio: 1841, PAPS 2: 31 (Savannah River, Georgia);

1842, TAPS 8: 238, pl. 22, fig. 52; 1842, Obs. 3: 76.

Figured holotype USNM 84908.

cromwellii Lea, Unio: 1865, PANSP 17: 89 (Kiokee Creek,

near Albany, Dougherty Co., Georgia); 1868, JANSP (2)

6: 258, pl. 31, fig. 73; 1869, Obs. 12: 18. Figured

holotype USNM 85280.

crudus Lea, Unio: 1871, PANSP 23: 190 (French Broad River

[Tennessee]; Swamp Creek, Murray Co., Georgia; Holston

River [Tennessee]); 1874, JANSP (2) 8: 17, pl. 4, fig. 10;

1874, Obs. 13: 18. Figured holotype USNM 85841 from the  
first locality.

- cucumoides Lea, Unio: 1840, PAPS 1: 285 (Hunters River, New South Wales, Australia; Jay); 1842, TAPS 8: 192, pl. 7, fig. 2; 1842, Obs. 3: 30. Figured holotype AMNH 30897, refigured by McMichael and Hiscock, 1958 Australian Jour. Marine and F. W. Res. 9: 474, pl. 14, figs. 3-4.
- cumberlandicus Lea, Unio: 1838, Obs. 2: 25, pl. 7, fig. 19 (Cumberland River, Tennessee); 1838, Obs. 2: 25. Figured holotype USNM 85254.
- cumingii Lea, Anodonta: 1850, Proc. Zool. London, p. 199 (Malacca). Changed to:
- cumingii Lea, Monocondylaea: 1860, JANSP (2) 4: 235, pl. 33, fig. 114; 1860, Obs. 7: 53. Figured holotype USNM 86350.
- cumingii Lea, Unio: 1852, PANSP 6: 54 (Northern part of China); 1860, JANSP (2) 4: 240, pl. 35, fig. 150; 1860, Obs. 7: 58. Figured holotype USNM 83897.
- cuneolus Lea, Unio: 1840, PAPS 1: 286 (Holston River, Tennessee); 1842, TAPS 8: 193, pl. 7, fig. 3; 1842, Obs. 3: 31. Figured holotype USNM 84591.
- cuprinus Lea, Unio: 1831, TAPS 4: 94, pl. 12, fig. 24 (Mexico); 1834, Obs. 1: 104. Figured holotype USNM 86121.

curatus Lea, Unio: 1863, PANSP 15: 193 (Sugar Creek [Mecklenburg Co.], North Carolina); 1866, JANSP (2) 6: 23, pl. 7, fig. 21; 1867, Obs. 11: 27. Known only from the figured type in the Wheatley colln. in the ANSP [lost]; there is a larger specimen under this name in the Wheatley colln. ANSP 127200.

curreyiana Lea, Unio: 1840, PAPS 1: 288 (Stone's River, Tennessee); 1842, TAPS 8: 223, pl. 18, fig. 40; 1842, Obs. 3: 61. Known only from the figured holotype USNM 86227.

curtus Lea, Unio: 1859, PANSP 11: 112 (Tombigbee River, Columbus [Lowndes Co.], Mississippi); 1961, JANSP (2) 5: 103, pl. 17, fig. 253; 1862, Obs. 8: 107. Figured holotype USNM 84737.

curvatus Lea, Unio: 1872, PANSP 24: 159 (Pfeiffers Pond, Mecklenburg Co., North Carolina); 1874, JANSP (2) 8: 47, pl. 13, fig. 35; 1874, Obs. 13: 42. Figured holotype USNM 85550.

cuspidatus Lea, Unio: 1872, PANSP 24: 159 (Buckhead Creek, Burke Co., Georgia; Abbeville District [Savannah River drainage], South Carolina); 1874, JANSP (2) 8: 43, pl. 14, fig. 40; 1874, Obs. 13: 47. Figured holotype USNM 86014 from the former locality.

- cuvierianus Lea, Unio: 1852, TAPS 10: 263, pl. 16, fig. 16  
(Washington Co., Georgia); 1852, Obs. 5: 19. Known  
only from the figured holotype USNM 85401.
- cylindracea Lea, Anodonta: 1838, TAPS 6: 45, pl. 13, fig. 40  
(River Medellin, near Vera Cruz [Vera Cruz State], Mexico;  
Burrough); 1838, Obs. 2: 45. Figured type and mentioned  
syntype not in the USNM or ANSP [lost]; specimen identified  
by Lea USNM 86712.
- cylindrellus Lea, Unio: 1868, PANSP 20: 144 (Duck Creek,  
Tennessee; Swamp Creek, Whitfield Co., Georgia; North  
Alabama); 1868, JANSP (2) 6: 308, pl. 48, fig. 121; 1869,  
Obs. 12: 68. Figured holotype USNM 85300 from the third  
locality.
- dactylus Lea, Unio: 1840, PAPS 1: 287 (Caney Fork [of the  
Cumberland River], Tennessee); 1842, TAPS 8: 196, pl. 9,  
fig. 7; 1842, Obs. 3: 34. Known only from the figured  
holotype USNM 85904.
- dahomeyensis Lea, Anodonta: 1859, PANSP 11: 154 (Dahomey,  
W Africa, Cuming); 1860, JANSP (2) 4: 261, pl. 41, fig.  
141; 1860, Obs. 7: 79. Known only from the figured  
holotype BMNH 1965193.

dallasiana Lea, Anodonta: 1863, PANSP 15: 190 (Lake Winnipeg,  
at the mouth of the Saskatchewan River [Manitoba, Canada]);  
1866, JANSP (2) 6: 29, pl. 11, fig. 28; 1867, Obs. 11: 33.  
Figured holotype USNM 86443.

damascensis Lea, Unio: 1863, PANSP 15: 190 (River Barada,  
Damascus [Iraq]; Wheatley); 1866, JANSP (2) 6: 55, pl. 18,  
fig. 52; 1867, Obs. 11: 59. Figured holotype ANSP 125733  
mentioned as in the Wheatley colln.; paratype USNM 85542.

danielsii Lea, Anodonta: 1858, PANSP 10: 139 ([Kansas River],  
Topeka [Shawnee Co.], Kansas); 1860, JANSP (2) 4: 365,  
pl. 63, fig. 190; 1860, Obs. 8: 47. Known only from the  
figured holotype USNM 86426.

dariensis Lea, Anodonta: 1858, PANSP 10: 139 ([Altamaha River]  
Hopeton, near Darien [McIntosh Co.]; Swift Creek, near  
Macon [Bibb Co.]; Flint River: all Georgia); 1859, JANSP  
(2) 4: 230, pl. 28, fig. 99; 1859, Obs. 7: 48. Figured  
holotype USNM 86600 from the second locality.

dariensis Lea, Unio: 1842, TAPS 8: 246, pl. 26, fig. 61  
([Altamaha River], near Darien, [McIntosh Co.], Georgia);  
1842, Obs. 3: 84. Known only from the figured holotype  
USNM 85691.

- datus Lea, Unio: 1868, PANSP 20: 161 (Paw Creek [Mecklenburg Co.]; Beaver Co. [=Creek, Gaston Co.]; Long Creek [Gaston Co.]; all North Carolina); 1868, JANSP (2) 6: 299, pl. 44, fig. 11; 1869, Obs. 12: 59. Figured holotype USNM 85097 labeled, Paw Creek, Beaver Co., North Carolina.
- decisus Lea, Unio: 1831, TAPS 4: 92, pl. 12, fig. 23 (Alabama River; 1834, Obs. 1: 102. Figured holotype USNM 84723.
- decora Lea, Anodonta: 1838, TAPS 6: 64, pl. 20, fig. 63 ([Miami and Erie] Canal near Cincinnati [Hamilton Co.]; [Ohio and Erie] Canal near Chillicothe [Ross Co.]; both Ohio); 1838, Obs. 2: 64. Figured holotype USNM 86633 from the former locality.
- decoratus Lea, Unio: 1852, TAPS 10: 257, p. 13, fig. 6 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 13. Figured holotype USNM 83972.
- decumbens Lea, Unio: 1861, PANSP 13: 40 (Alabama); 1861, JANSP (2) 5: 87, pl. 12, fig. 236; 1862, Obs. 8: 91. Known only from the figured holotype USNM 86150.
- delicatus Lea, Unio: 1863, PANSP 15: 189 (River Orontis, Syria); 1866, JANSP (2) 6: 58, pl. 19, fig. 56; 1867, Obs. 11: 62. Known only from the figured holotype USNM 84906.

- delphinus Lea, Unio: 1842, TAPS 8: 218, pl. 15, fig. 35 (New Holland [Australia] ?); 1842, Obs. 3: 56. Figured holotype USNM 83910.
- deltoidea Lea, Margaritana: 1838, TAPS 6: 43, pl. 13, fig. 38 (Ohio River near Cincinnati [Hamilton Co.]; Scioto River, both Ohio); 1838, Obs. 2: 43. Figured holotype USNM 86215 from the latter locality.
- demeraraensis Lea, Unio: 1859, PANSP 11: 152 (Demerara, British Guiana; Cuming); 1860, JANSP (2) 4: 253, p. 39, fig. 133; 1860, Obs. 7: 71. Known only from the figured type. Not in the BMNH or USNM [lost].
- denigrata Lea, Anodonta: 1852, TAPS 10: 285, pl. 25, fig. 45 (Campbell Co., East Tennessee); 1852, Obs. 5: 41. Figured holotype USNM 86535.
- denigratus Lea, Unio: 1857, PANSP 9: 171 (streams near Columbus [Muscogee Co.], Georgia); 1859, JANSP (2) 4: 200, pl. 23, fig. 83; 1859, Obs. 7: 18. Figured holotype USNM 85568.
- differtus Lea, Unio: 1872, PANSP 24: 158 ([Savannah River] Georgia?); 1874, JANSP (2) 8: 42, pl. 14, fig. 39; 1874, Obs. 13: 46. Figured holotype USNM 85399.

- difficilis Lea, Unio: 1868, PANSP 20: 144 (Swamp Creek, Whitfield Co., Georgia; head waters of the Holston [River], Washington Co., Virginia); 1868, JANSP (2) 6: 311, pl. 49, fig. 124; 1869, Obs. 12: 71. Figured holotype USNM 85158 from the former locality.
- dignatus Lea, Unio: 1863, PANSP 15: 189 (River Tigris, Bagdad [Iraq]); 1866, JANSP (2) 6: 51, pl. 17, fig. 48; 1867, Obs. 11: 55. Figured holotype USNM 84714.
- diminutus Lea, Unio: 1859, PANSP 11: 151 (East Africa; Cuming); 1860, JANSP (2) 4: 254, pl. 39, fig. 134; 1860, Obs. 7: 72. Figured holotype BMNH 1965165.
- dimotus Lea, Margaron: 1870, Synopsis Unionidae, 4th edit., p. 30. New name for Unio sumatrensis Lea, 1859 non Dunker 1852.
- diomotus Lea, Unio: see under sumatrensis Lea, Unio.
- discoidea Lea, Symphynota: 1834, TAPS 5: 73, pl. 11, fig. 33 (China); 1834, Obs. 1: 187. Figured holotype USNM 86358 Burrough colln., not returned to the ANSP; specimens under this name ANSP 56521.
- discrepans Lea, Unio: 1860, PANSP 12: 92 (North Alabama); 1860, JANSP (2) 4: 340, pl. 55, fig. 165; 1860, Obs. 8: 22. Figured holotype USNM 85267.



disculus Lea, Unio: 1860, PANSP 12: 91 (Uruguay River [Argentina and Uruguay]); 1863, JANSP (2) 5: 385, pl. 44, fig. 293; 1863, Obs. 10: 21. Known only from the figured holotype USNM 85775.

discus Lea, Unio: 1838, TAPS 6:74, pl. 18, fig. 57 (India, probably a Mexican shell, teste Marshall); 1838, Obs. 2: 74. Figured holotype USNM 85341.

dispansus Lea, Unio: 1871, PANSP 23: 191 (East Tennessee); 1874, JANSP (2) 8: 19, pl. 6, fig. 16; 1874, Obs. 13: 23. Figured holotype USNM 85094.

dispar Lea, Unio: 1860, PANSP 12: 305 ([Chattahoochee River] Columbus [Muscogee Co.], Georgia); 1860, JANSP (2) 4: 327, pl. 51, fig. 153; 1860, Obs. 8: 9. Figured holotype USNM 85101.

dissimilis Lea, Unio: 1872, PANSP 24: 161 (Long Creek, Gaston Co.; Pfeiffers Pond, Mecklenburg Co.; both North Carolina); 1874, JANSP (2) 8: 53, pl. 18, fig. 52; 1874, Obs. 13: 57. Figured holotype USNM 86019 from the former locality.

divaricatus Lea, Unio: 1834, TAPS 5: 64, pl. 9, fig. 24 (Egypt [South America]); 1834, Obs. 1: 176. Figured holotype USNM 85332.

dolabelloides Lea, Unio: 1840, PAPS 1: 288 (Holston River, Tennessee); 1842, TAPS 8: 215, pl. 15, fig. 31; 1842, Obs. 3: 53. Known only from the figured holotype USNM 85828.

dolabraeformis Lea, Unio: 1838, TAPS 6: 103, pl. 24, fig. 113 (Altamaha River, Liberty [now Long] Co.; Altamaha River, near Darien [McIntosh Co.]; both Georgia); 1838, Obs. 2: 103. Figured holotype USNM 84888.

dolearis Lea, Anodonta: 1863, PANSP 15: 193 (Stewarts Mill Dam, Union Co., North Carolina, Wheatley). Changed to:  
doliaris Lea, Anodonta: 1866, JANSP (2) 6: 24, pl. 8, fig. 23; 1867, Obs. 11: 28. Figured holotype ANSP 126522a in the Wheatley colln.

doliaris Lea, Unio: 1865, PANSP 17: 88 (Etowah River, Georgia); 1868, JANSP (2) 6: 260, pl. 32, fig. 75; 1869, Obs. 12: 20. Known only from the figured holotype USNM 84936.

dolosus Lea, Unio: 1860, PANSP 12: 307 (Alabama River, Claiborne [Monroe Co.]; Coosa River; both Alabama); 1861, JANSP (2) 5: 75, pl. 9, fig. 224; 1862, Obs. 8: 79. Figured holotype USNM 86119 from the former locality.

donaciformis Lea, Unio: 1828, TAPS 3: 267, pl. 4, fig. 3;

1834, Obs. 1: 9. Figured holotype USNM 84457.

dooleyensis Lea, Unio: 1874, PANSP for 1873, 25: 424 ([Flint River], Dooley Co., Georgia; Abbeville, [Savannah River drainage] Abbeville Co., South Carolina); 1874, JANSP (2) 8: 64, pl. 22, fig. 60; 1874, Obs. 13: 68. Figured holotype USNM 85538 from the former locality.

dorfeuillianus Lea, Unio: 1838, TAPS 6: 73, pl. 17, fig. 54

(Ohio River; Dorfeuille); 1838, Obs. 2: 73. Known only from the figured holotype USNM 84215 labeled, "Wabash River, Indiana, Dorfeuille."

dorsatus Lea, Unio: 1868, PANSP 20: 160 (Catawba River,

North Carolina); 1868, JANSP (2) 6: 300, pl. 45, fig. 112;

1869, Obs. 12: 60. Figured holotype USNM 84494.

downiei Lea, Unio: 1858, PANSP 10: 166 (Buck Lake, a bayou of

the Satilla River, Wayne [Brantly] Co., Georgia); 1859,

JANSP (2) 4: 210, pl. 25, fig. 91, 1859, Obs. 7: 28. Figured holotype USNM 84854.

dromus Lea, Unio: 1834, TAPS 5: 70, pl. 10, fig. 29; 1834,

Obs. 1: 182 (Harptch River; Cumberland River, near

Nashville [Davidson Co.]; both Tennessee). Figured

holotype USNM 25852 from the former locality.

dunkerianus Lea, Unio: 1856, PANSP 8: 94 (Rio Macacou, Rio de Janeiro [Brazil]; New Granada [Colombia]); 1857, JANSPP (2) 3: 303, pl. 28, fig. 20; 1857, Obs. 6: 25. Figured holotype USNM 84155.

dunlapiana Lea, Anodonta: 1842, TAPS 8: 248, pl. 27, fig. 65 (South Carolina); 1842, Obs. 3: 86. Figured type not in the USNM [lost]. Lectotype USNM 86564 selected by Johnson, 1970, Bull. Mus. Comp. Zool. 140: 365, pl. 17, fig. 1, from Charleston, Chatham Co., South Carolina.

duttonianus Lea, Unio: 1841, PAPS 2: 31 (Ogeechee Canal, Savannah [Chatham Co.], Georgia; Dutton); 1842, TAPS 8: 236, pl. 22, fig. 50; 1842, Obs. 3: 74. Known only from the figured type, in the T. R. Dutton colln. [lost].

dysonii Lea, Unio: 1859, PANSP 11: 152 (Honduras; Cuming); 1860, JANSPP (2) 4: 252, p. 39, fig. 132; 1860, Obs. 7: 70. Known only from the figured holotype BMNH 1965173.

ebenus Lea, Unio: 1831, TAPS 4: 84, pl. 9, fig. 14 (Ohio); 1834, Obs. 1: 94. Figured holotype USNM 85792.

edgarianus Lea, Unio: 1840, PAPS 1: 288 (Holston River, Tennessee; Tennessee River, Florence [Lauderdale Co.], Alabama); 1842, TAPS 8: 214, pl. 15, fig. 20; 1842, Obs. 3: 52. Figured holotype USNM 84685 from the former **locality**.

effulgens Lea, Unio: 1856, PANSP 8: 94 (Brazil); 1857, JANSP

(2) 3: 303, pl. 28, fig. 18; 1857, Obs. 6: 23. Known only from the figured holotype USNM 84406.

eightsii Lea, Unio: 1860, PANSP 12: 306 ([Cebalo River], 28 mi E San Antonio, [Bexar Co.], Texas; Sabinas River, New [Nuevo] Leon[State] Mexico); 1860, JANSP (2) 4: 367, pl. 64, fig. 192; Obs. 8: 49. Figured holotype USNM 83991 from the latter locality.

elegans Lea, Unio: 1831, TAPS 4: 83, pl. 9, fig. 13 (Ohio River) 1834, Obs. 1: 93. Figured holotype USNM 84449.

elliottii Lea, Margaritana: 1858, PANSP 10: 138 (Chattahoochee River [below Uchee Bar] near Columbus [Muscogee Co.], Georgia); 1859, JANSP (2) 4: 226, pl. 31, fig. 108; 1859, Obs. 7: 44. Figured holotype USNM 86257.

elliottii Lea, Unio: 1856, PANSP 8: 262 (Othcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 54, pl. 7 fig. 37; 1858, Obs. 6: 54. Figured holotype USNM 84019.

ellipsis Lea, Unio: 1828, TAPS 3: 268, pl. 4, fig. 4 (Ohio; T. G. Lea); 1834, Obs. 1: 10. Type [lost]; syntypes ANSP 56614 mentioned as in the ANSP.

- elliptica Lea, Margaritana: 1859, PANSP 11: 113 (Tombigbee River, Columbus [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 106, pl. 18, fig. 254; 1862, Obs. 8: 110. Figured holotype USNM 86258.
- emarginatus Lea, Mycetopus: 1860, PANSP 12: 308 (Siam); 1863, JANSP (2) 5: 398, pl. 50, fig. 305; 1863, Obs. 10: 34. Known only from the figured holotype USNM 86787.
- emarginatus Lea, Unio: 1834, TAPS 5: 62, pl. 9, fig. 22 (no locality [circummediterranean region]); 1834, Obs. 1: 174. Figured holotype USNM 86159, consists of almost matching, opposed valves.
- emesaensis Lea, Unio: 1866, PANSP 17: 286 (Lake Homs, River Orontes, North Syria); 1868, JANSP (2) 6: 254, pl. 30, fig. 68; 1869, Obs. 12: 14. Figured holotype USNM 85856.
- emmonsii Lea, Unio: 1857, PANSP 9: 86, (Roanoke River, Weldon [Halifax Co.] North Carolina); 1861, JANSP (2) 5: 56, pl. 2, fig. 203; 1862, Obs. 8: 60. Figured holotype USNM 86028.
- encarpus Lea, Unio: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSP (2) 6: 294, pl. 42, fig. 105; 1869, Obs. 12: 54. Figured holotype USNM 84386.

errans Lea, Unio: 1856, PANSP 8: 262 (Tobesaufke [Tobesofkee] Creek, near Macon [Bibb Co.], Georgia); 1858, JANSP (2) 4: 60, pl. 9, fig. 42; 1858, Obs. 6: 60. Figured holotype USNM 85541.

estabrookianus Lea, Unio: 1845, PAPS 4: 164 (Clinch River; Second Creek; both Tennessee); 1848, TAPS 10: 77, pl. 6, fig. 17; 1848, Obs. 4: 51. Figured holotype USNM 84389 from the former locality.

etowahensis Lea, Margaritana: 1858, PANSP 10: 138 (Tennessee; Etowah River, Georgia); 1859, JANSP (2) 4: 227, pl. 31, fig. 110; 1859, Obs. 7: 45. Figured holotype USNM 86259. Non Conrad 1849. Changed by Lea, 1859, PANSP 11: 280 to Margaritana georgiana.

exactus Lea, Unio: 1858, PANSP 10: 41 (Neuse River, 6 mi from [East] Raleigh [Wake Co.] North Carolina); 1861 JANSP (2) 5: 62, pl. 4, fig. 210; 1862, Obs. 8: 66. Known only from the figured holotype USNM 85002.

exacutus Lea, Unio: 1872, PANSP 24: 159 (Savannah River at Governor Hamilton's [Mansion, 8 mi. S of Hardeeville, Jasper Co., South Carolina] Georgia); 1874, JANSP (2) 8: 45, pl. 15, fig. 43; 1874, Obs. 13: 49. Figured holotype USNM 85872.

- excavatus Lea, Unio: 1857, PANSP 9: 32 (Othcalooga [Oothkalooga] Creek, Gordon Co.; Etowah River; both Georgia; [Alabama River] Claiborne [Monroe Co.], Alabama); 1858, JANSP (2) 4: 71, pl. 13, fig. 52; 1858, Obs. 6: 71. Figured holotype USNM 84498 from the first locality.
- exiguus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, near Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 191, pl. 7, fig. 1; 1842, Obs. 3: 29. Figured holotype USNM 84974.
- exilior Lea, Anodonta: 1871, PANSP 23: 188 (Mexico); 1874, JANSP (2) 8: 24, pl. 7, fig. 21; 1874, Obs. 13: 28. Figured holotype USNM 86730.
- exilis Lea, Anodonta: 1838, TAPS 6: 81, pl. 22, fig. 68 (Hab.? [Java]) 1838, Obs. 2: 81. Figured holotype USNM 86726.
- eximius Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2) 3: 294, pl. 25, fig. 8; 1857, Obs. 6: 14. Figured holotype USNM 83900.
- extensus Lea, Unio: 1857, PANSP 9: 31 (Dry Creek, near Columbus [Muscogee Co.], Georgia); 1858, JANSP (2) 4: 67, pl. 12, fig. 49; 1858, Obs. 6: 67. Figured holotype USNM 85995.
- evitatus Lea, Unio: 1866, PANSP 18: 133 (Bengal); 1868, JANSP (2) 6: 279, pl. 38, fig. 92; 1869, Obs. 12: 39. Figured holotype USNM 85191.



fabaceus Lea, Unio: 1861, PANSP 13: 38 (Oostanaula River, Georgia); 1861, JANSP (2) 5: 90, pl. 13, fig. 238; 1862, 1862, Obs. 8: 94. Known only from the figured holotype USNM 85165.

fabilis Lea, Unio: 1831, TAPS 4: 86, pl. 10, fig. 16 (Ohio River); 1834, Obs. 1: 96. Figured holotype USNM 85270a.

fabula Lea, Margaritana: 1838, TAPS 6: 44, pl. 13, fig. 39 (Cumberland River, Tennessee); 1838, Obs. 2: 44. Figured holotype USNM 86325.

fallax Lea, Unio: 1857, PANSP 9: 32 (streams near Columbus [Muscogee Co.], Georgia; Elliott; French Broad River, Tennessee, Clark); 1858, JANSP (2) 4: 79, pl. 15, fig. 59; 1858, Obs. 6: 79. Figured type not in the USNM [lost].

fassinans Lea, Unio: 1868, PANSP 20: 143 (head waters of Holston River, Washington Co., Virginia); 1868, JANSP (2) 6: 305, pl. 47, fig. 118. 1869, Obs. 12: 65. Known only from the figured holotype USNM 84926.

fatuus Lea, Unio: 1840, PAPS 1: 287 (Holston River, Tennessee); 1842, TAPS 8: 201, pl. 11, fig. 14; 1842, Obs. 3: 39. Figured holotype USNM 86047.

favosus Lea, Unio: 1856, PANSP 8: 262 (Oothcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 58, pl. 8, fig. 40; 1858, Obs. 6: 58. Figured holotype USNM 84585.

- ferussaciana Lea, Anodonta: 1834, TAPS 5: 45, pl. 6, fig. 15  
(Ohio River, near Cincinnati [Hamilton Co.], Ohio); 1834,  
Obs. 1: 157. Figured holotype USNM 86520.
- ferussacianus Lea, Unio: 1868, JANSP (2) 6: 266 [foot note]  
(Bagdad [Syria]); 1869, Obs. 12: 15. Known only from the  
holotype USNM 85182.
- ferruginea Lea, Anodonta: 1840, PAPS 1: 289 (Simon's Creek  
[not located], Indiana); 1842, TAPS 8: 225, pl. 19, fig. 43;  
1842, Obs. 3: 63. Figured holotype USNM 86539.
- fibuloides Lea, Unio: 1859, PANSP 11: 154 (Connasauga River,  
Georgia); 1859, JANSP (2) 4: 219, pl. 28, fig. 100;  
1859, Obs. 7: 37. Figured holotype USNM 85809.
- firmus Lea, Unio: 1866, PANSP 18: 33 (South America); 1868,  
JANSP (2) 6: 267, pl. 34, fig. 82; 1869, Obs. 12: 27.  
Figured holotype USNM 85113.
- fisherianus Lea, Unio: 1838, TAPS 6: 8, pl. 4, fig. 8 (Head  
of Chester River, Maryland); 1838, Obs. 2: 8. Figured  
holotype USNM 86022.
- flavescens Lea, Unio: 1845, PAPS 4: 163 (Black Warrior River,  
Alabama); 1848, TAPS 10: 72, pl. 3, fig. 9; 1848, Obs. 4:  
46. Figured holotype USNM 84952.

flavidulus Lea, Unio: 1861, PANSP 13: 39 (stream [Tombigbee River, written in shell] near Columbus [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 97, pl. 15, fig. 245; 1862, Obs. 8: 101. Figured holotype USNM 84719.

flavidus Lea, Unio: 1872, PANSP 24: 156 (Clinch River, Anderson Co., Tennessee; North Alabama); 1874, JANSP (2) 8: 28, pl. 9, fig. 25; 1874, Obs. 13: 32. Figured holotype USNM 84550 from the former locality.

florentinus Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River], Florence [Lauderdale Co.], Alabama; Cumberland River, Tennessee); 1861, JANSP (2) 5: 64, pl. 5, fig. 213; 1862, Obs. 8: 68. Figured holotype USNM 84948.

floridensis Lea; Unio: 1852, TAPS 10: 274, pl. 21, fig. 31 (Chácktaháchi River, West Florida; Le Conte; restricted by Clench and Turner, 1956, Bull. Florida State Mus. 1: 202 to Choctawhatchee River, 1 mi W Caryville, Holmes Co., Florida); 1852, Obs. 5: 30. Clench and Turner claimed that the figured holotype was in the USNM, but it is not; Lea returned the specimen to Le Conte. Figured holotype ANSP 42081

- fluctiger Lea, Unio: 1859, PANSP 11: 152 (Hab.?; Cuming;  
Southeast Asia, teste Simpson); 1860, JANSP (2) 4: 250,  
pl. 39, fig. 130; 1860, Obs. 7: 68. Known only from the  
figured holotype BMNH 1965169.
- folliculatus Lea, Unio: 1838, TAPS 6: 38, pl. 11, fig. 33  
(Savannah River [Georgia]); 1838, Obs. 2: 38. Figured  
holotype USNM 85861.
- footiana Lea, Anodonta: 1840, PAPS 1: 289 ([Lake Winnebago]  
vicinity of Fort Winnebago [Winnebago Co., Wisconsin]);  
1842, TAPS 8: 225, pl. 20, fig. 44; 1842, Obs. 3: 63.  
Figured holotype USNM 86468 consists of a single right  
valve.
- forbesiana Lea, Anodonta: 1860, PANSP 12: 92 (Uruguay River,  
[Argentina and Uruguay]); 1863, JANSP (2) 5: 393, pl. 47,  
fig. 301; 1863, Obs. 10: 29. Figured holotype USNM 86694.
- forbesianus Lea, Unio: 1852, TAPS 10: 264, pl. 16, fig. 17  
(Savannah River [Georgia]); 1852, Obs. 5: 20. Figured  
holotype USNM 84542.
- foremanianus Lea, Unio: 1842, TAPS 8: 247, pl. 27, fig. 64  
(Coosa River, Alabama); 1842, Obs. 3: 85. Figured holotype  
USNM 84439.

- formosus Lea, Unio: 1831, TAPS 4: 111, pl. 16, fig. 41 (Ohio River; T. G. Lea); 1834, Obs. 1, 121. Figured type not found in the USNM; syntypes mentioned as in the ANSP [lost].
- forsheyi Lea, Unio: 1859, PANSP 11: 155 ([Colorado River] Fayette Co., Texas; Alabama, [Texas], Anthony); 1860, JANSF (2) 4: 357, pl. 60, fig. 182; 1860, Obs. 8: 39. Figured holotype USNM 84169 labeled, "Texas, Anthony."
- fraternus Lea, Unio: 1852, TAPS 10: 263, pl. 16, fig. 15 ([Chattahoochee River], Columbus [Muscogee Co.], Georgia; Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 19. Figured holotype USNM 85396 from the latter locality.
- fucatus Lea, Unio: 1860, PANSP 12: 92 (North Alabama; [Tennessee River], Tuscumbia, [Colbert Co., Alabama]); 1860, JANSF (2) 4: 354, pl. 59, fig. 178; 1860, Obs. 8: 35. Figured type not in the USNM [lost]. Specimen identified by Lea MCZ 178898 Cumberland River drainage, Murfreesboro, Rutherford Co., Tennessee.
- fulgidus Lea, Unio: 1845, PAPS 4: 164 ([Red River] Alexandria [Rapides Parish], Louisiana); 1848, TAPS 10: 73, pl. 4, fig. 10; 1848, Obs. 4: 47. Figured holotype USNM 84649.

fuliginosus Lea, Unio: 1845, PAPS 4: 164 (Cobb's Creek, near Philadelphia, [Philadelphia Co. Pennsylvania]); 1848, TAPS 10: 78, pl. 7, fig. 19; 1848, Obs. 4: 52. Figured holotype USNM 85665.

fulvus Lea, Unio: 1834, TAPS 5: 96, pl. 13, fig. 39 (South Carolina); 1834, Obs. 1: 208. Figured holotype USNM 85679.

fumatus Lea, Unio: 1857, PANSP 9: 171 (Chattahoochee River, near Columbus [Muscogee Co.], Georgia; Hospaliga Creek, Alabama [and] Georgia); 1858, JANSP (2) 4: 88, pl. 18, fig. 68; 1858, Obs. 6: 88. Figured holotype USNM 85552 from the former locality.

funeralis Lea, Unio: 1860, PANSP 12: 91 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 378, pl. 41, fig. 286; 1863, Obs. 10: 14. Figured holotype USNM 85777.

fuscatus Lea, Unio: 1843, Desc. Twelve Uniones (Black Creek, Florida); 1846, TAPS 9: 277, pl. 40, fig. 4; 1848, Obs. 4: 35. Figured holotype USNM 85243.

gabbianus Lea, Unio: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSP (2) 6: 295, pl. 43, fig. 106; 1869, Obs. 12: 55. Figured holotype USNM 84387.

gastonensis Lea, Unio: 1863, PANSP 15: 191 (Mine Creek, Gaston Co., North Carolina); 1866, JANSP (2) 6: 20, pl. 6, fig. 18; 1867, Obs. 11: 24. Figured holotype USNM 85409.

geddingsianus Lea, Unio: 1840, PAPS 1: 285 (Congaree River, South Carolina); 1842, TAPS 8: 202, pl. 11, fig. 15; 1842, Obs. 3: 40. Figured holotype USNM 85650.

geminus Lea, Unio: 1856, PANSP 8: 262 (Buckhead Creek, Burke Co., Georgia); 1858, JANSP 4: 63, pl. 10, fig. 45; 1858, Obs. 6: 63. Figured holotype USNM 84856.

genthii Lea, Unio: 1857, PANSP 9: 85 (Catawba River, Gaston Co.; Deep River, Gulf [Chatham Co.]; both North Carolina, restricted by Johnson, 1970, Bull. Mus. Comp. Zool. 140: 378, to the latter locality); 1861, JANSP (2) 5: 57, pl. 2, fig. 204; 1862, Obs. 8: 61. Figured holotype USNM 84834.

genuinus Lea, Unio: 1868, PANSP 20: 161 (Bissels Pond, Charlotte [Mecklenburg Co.], North Carolina); 1868, JANSP (2) 6: 305, pl. 46, fig. 117; 1869, Obs. 12: 64. Figured holotype USNM 85123.

geometricus Lea, Unio: 1834, TAPS 5: 38, pl. 4, fig. 10 (Bayou Teche, [St. Landry Parish], Louisiana, Stewart); 1834, Obs. 1: 150. Type [lost]; specimen USNM 85712, subsequently identified by Lea from Janin.

georgiana Lea, Margaritana: 1859, PANSP 11: 280. New name for Margaritana etowahensis Lea 1858, non Conrad 1849.

georgianus Lea, Unio: 1841, PAPS 2: 31 (Stump Creek [not located] Georgia); 1842, TAPS 8: 235, pl. 21, fig. 49; 1842, Obs. 3: 73. Known only from the figured holotype USNM 84928.

gerhardtii Lea, Unio: 1862, PANSP 14: 168 ([Tennessee River] Chattanooga [James Co.], Georgia, [sic] [Tennessee]); 1862, JANSP (2) 5: 208, pl. 31, fig. 277; 1863, Obs. 9: 30. Known only from the figured holotype USNM 25711.

germanus Lea, Unio: 1861, PANSP 13: 40 (Coosa River, Alabama); 1866, JANSP (2) 6: 49, pl. 19, fig. 54; 1867, Obs. 11: 53. Known only from the figured holotype USNM 85296.

gesnerii Lea, Anodonta: 1858, PANSP 10: 139 (Uphaupsee Creek, Macon Co., Alabama); 1859, JANSP (2) 4: 231, pl. 31, fig. 109; 1859, Obs. 7: 49. Figured holotype USNM 86427.

gesnerii Lea, Margaritana: 1858, PANSP 10: 138 (Uphaupsee Creek, [Macon Co.], Alabama; Chattahoochee River below Columbia, [sic] [Columbus, Muscogee Co.], Georgia); 1862, JANSP (2) 5: 211, pl. 32, fig. 280; 1863, Obs. 9: 33. Figured holotype USNM 86212 from the former locality.



gesnerii Lea, Unio: 1874, PANSP for 1873, 25: 424 (Uchee River [Russell Co., Alabama] near Columbus, Georgia); 1874, JANSP (2) 8: 65, pl. 22, fig. 64; 1874, Obs. 13: 69. Figured holotype USNM 85670.

gibber Lea, Unio: 1838, TAPS 6: 35, pl. 10, fig. 30 (Caney Fork [of Cumberland River], Tennessee); 1838, Obs. 2: 35. Figured holotype USNM 84544.

gibbesianus Lea, Unio: 1852, TAPS 10: 254, pl. 12, fig. 2 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 10. Known only from the figured holotype USNM 85685.

gigantea Lea, Anodonta: 1838, TAPS 6: 1, pl. 1, fig. 1 ([Bayou Pierre] near Port Gibson [Claiborne Co., Mississippi]); 1838, Obs. 2: 1. Figured holotype USNM 86659.

glaber Lea, Unio: 1838, TAPS 6: 34, pl. 10, fig. 29 (Holston River, Tennessee); 1838, Obs. 2: 34. Figured holotype USNM 85266.

glandaceus Lea, Unio: 1861, PANSP 13: 59 (Cahawba River, Alabama); 1861, JANSP (2) 5: 77, pl. 9, fig. 226; 1862, Obs. 8: 81. Figured holotype USNM 84577.

glans Lea, Unio: 1831, TAPS 4: 82, pl. 8, fig. 12 (Ohio); 1834, Obs. 1: 92. Figured holotype USNM 85312.

globatus Lea, Unio: 1871, PANSP 23: 191 (Holston River, East Tennessee; Etowah River, Georgia); 1874, JANSP (2) 8: 5, pl. 1, fig. 1; 1874, Obs. 13: 9. Figured holotype USNM 85820 from the former locality.

globosa Lea, Anodonta: 1841, PAPS 2: 31 (Concha Lake, 20 leagues [= 60 mi.] S Vera Cruz near Tlocatalpam [Tlacatalpan, Vera Cruz State], Mexico); 1842, TAPS 8: 241, pl. 24, fig. 56; 1842, Obs. 3: 79. Figured holotype USNM 86701.

globosa Lea, Symphynota: 1834, TAPS 5: 41, pl. 4, fig. 12 (River Ohio, 150 mi. below Louisville [Kentucky]; Long); 1834, Obs. 1: 153. Type not in the USNM; smaller syntypes ANSP 56609 from Long, mentioned as in the ANSP.

globosus Lea, Unio: 1831, TAPS 4: 119 ([Ohio]); 1834, Obs. 1: 129. Types not found in the USNM or ANSP, though mentioned as in the latter.

goascoranensis Lea, Unio: 1858, PANSP 10: 118 (River Goascoran, Honduras, Pacific slope); 1860, JANSP (2) 4: 258, pl. 41; fig. 139; 1860, Obs. 7: 76. Figured holotype USNM 85086.

gouldii Lea, Unio: 1845, PAPS 4: 165 ([Black Warrior River] Tuscaloosa [Tuscaloosa Co.], Alabama); 1848, TAPS 10: 76, p. 6, fig. 16; 1848, Obs. 4: 50. Known only from the figured holotype USNM 85160.

gracilentus Lea, Unio: 1857, PANSP 9: 85 (Catawba River, Gaston Co., North Carolina); 1861, JANSF (2) 5: 58, pl. 3, fig. 205; 1862, Obs. 8: 62. Figured holotype USNM 85976.

gracilis Lea, Anodonta: 1850, Proc. Zool. Soc. London, p. 197 (Dingle, Isle of Panay, Philippine Islands); 1860, JANSF (2) 4: 239, pl. 34, fig. 119; 1860, Obs. 7: 57. Figured holotype USNM 86722.

gracillior Lea, Unio: 1856, PANSP 8: 262 (Buckhead Creek [Burke Co.]; Tobesaufke [Tobesofkee] Creek near Macon [Bibb Co.]; both Georgia); 1858, JANSF (2) 4: 56, pl. 8, fig. 38, 1858, Obs. 6: 56. Figured holotype USNM 85088 [localities not separated].

granadensis Lea, Anodonta: 1868, PANSP 20: 96 (Lake Nicaragua [Central America]); 1868, JANSF (2) 6: 288, pl. 41, fig. 100; 1869, Obs. 12: 48. Figured holotype USNM 86655.

granadensis Lea, Unio: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]); 1868, JANSF (2) 6: 292, pl. 42, fig. 103; 1869, Obs. 12: 53. Figured holotype USNM 84388.

Non Unio granadensis Conrad 1855. Changed to: Micronaias marshalli, Morrison, 1943, Nautilus 57: 15.

grandidens Lea, Unio: 1862, PANSP 14: 168 (near Hot Springs, Arkansas); 1862, JANSP (2) 5: 205, pl. 30, fig. 274; 1863, Obs. 9: 27. Figured holotype USNM 84313 consists of a single valve. Is a Chinese species, Quadrula nodulosa Wood, teste Simpson, 1900, PUSNM 22: 799.

grandioides Lea, Anodonta: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31516. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls, p. 251, pl. 34, figs. 2, 3. Is Anodonta grandis Say.

graniferus Lea, Unio: 1838, TAPS 6: 69, pl. 19, fig. 60 (Ohio River, near Cincinnati [Hamilton Co.], Ohio, T. G. Lea); 1838, Obs. 2: 69. Figured holotype USNM 84296 labeled, "Tennessee River, Tuscumbia, Colbert Co., Alabama; Pybas."

granulatus Lea, Unio: 1861, PANSP 13: 40 (Big Prairie Creek [Hale Co]; Alabama); 1866, JANSP (2) 6: 46, pl. 16, fig. 46; 1867: Obs. 11: 52. Known only from the figured holotype USNM 85297.

gratus Lea, Unio: 1860, PANSP 12: 91 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 382, pl. 43, fig. 290; 1863, Obs. 10: 18. Known only from the figured holotype USNM 85784.

gravidus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2) 3: 292, pl. 24, fig. 5; 1857, Obs. 6: 12. Figured holotype USNM 83935.

grayanus Lea, Unio: 1834, TAPS 5: 66, pl. 9, fig. 26 (China); 1834, Obs. 1: 178. Figured holotype USNM 84162.

griffithianus Lea, Unio: 1834, TAPS 5: 103, pl. 15, fig. 46 (South Carolina); 1834, Obs. 1: 215. Figured holotype USNM 85610.

hainesianus Lea, Unio: 1856, PANSP 8: 92 (Siam, Haines); 1857: JANSP (2) 3: 289, pl. 21, fig. 1; 1857, Obs. 6: 9. Figured type not in the USNM or AMNH; syntype USNM 83933.

haleianus Lea, Unio: 1842, TAPS 8: 247, pl. 27, fig. 63 (Mississippi River, 30 mi. above New Orleans); 1842, Obs. 3: 85. Known only from the figured holotype USNM 85306 marked on shell, [Red River] Alexandria [Rapides Parish, Louisiana].

- hallenbeckii Lea, Anodonta: 1858, PANSP 10: 138 (Uphaupee [Uphapee] Creek, Macon Co., Georgia [Alabama]; 1859, JANSP (2) 4: 232, pl. 32, fig. 112; 1859, Obs. 7: 50. Figured holotype USNM 86428.
- hallenbeckii Lea, Unio: 1859, PANSP 11: 170 (Flat Rock Creek and Four Mile Creek, near Columbus [Muscogee Co.], Georgia); 1860, JANSP (2) 4: 328, pl. 51, fig. 154; 1860, Obs. 8: 10. Figured holotype USNM 85537 written in the shell is Black Dirt Creek, [near Columbus, Muscogee Co., Georgia].
- hanleyianus Lea, Unio: 1852, TAPS 10: 279, pl. 23, fig. 37 (Coosawattee River, Murray Co., Georgia); 1852, Obs. 5: 35. Figured holotype USNM 84717.
- harpethensis Lea, Unio: 1840, PAPS 1: 289 (Harpeth River, Tennessee); 1842, TAPS 8: 224, pl. 19, fig. 42; 1842, Obs. 3: 62. Figured holotype USNM 86657.
- hartmanianus Lea, Unio: 1860, PANSP 12: 307 (Coosa River, Wetumpka, [Elmore Co.], Alabama; Clinch River, Tennessee); 1861, JANSP (2) 5: 73, pl. 8, fig. 222; 1862, Obs. 8: 77. Figured holotype USNM 84652 from the former locality.

- hastatus Lea, Unio: 1874, PANSP for 1873, 25: 423 (New Market, Abbeville District [Savannah River drainage] South Carolina; Rocky Creek, near Macon, Bibb Co., Georgia); 1874, JANSP (2) 8: 56, pl. 19, fig. 54; 1874, Obs. 13: 60. Figured holotype USNM 86013 from the former locality.
- haysianus Lea, Unio: 1834, TAPS 5: 35, pl. 3, fig. 7 (Cumberland River [Tennessee], Troost); 1834, Obs. 1: 147. Type [lost]; specimen USNM 84613, subsequently identified by Lea from Edgar.
- hazlehurstianus Lea, Unio: 1858, PANSP 10: 166 (Satilla River, Camden Co., Georgia); 1859, JANSP (2) 4: 211, pl. 26, fig. 92; 1859, Obs. 7: 29. Figured holotype USNM 86009.
- hebes Lea, Unio: 1852, TAPS 10: 267, pl. 18, fig. 21 (Oconee River, near Athens [Clarke Co.], Georgia); 1852, Obs. 5: 23. Known only from the figured holotype USNM 85383.
- heermannii Lea, Unio: 1861, PANSP 13: 392 (Medina River, [San Antonio River system], Texas); 1862, JANSP (2) 5: 194, pl. 26, fig. 263; 1863, Obs. 9: 16. Figured holotype USNM 83932.
- henryana Lea, Anodonta: 1857, PANSP 9: 102 ([Rio Grande] Matamoras, Tamaulipas [State], Mexico); 1860, JANSP (2) 4: 373, pl. 66, fig. 198; 1860, Obs. 8: 55. Figured holotype USNM 86692.

- hepaticus Lea, Unio: 1859, PANSP 11: 154 (Salkahatchee River, South Carolina); 1860, JANSP (2) 4: 348, pl. 57, fig. 173; 1860, Obs. 8: 30. Figured holotype USNM 35559.
- heterodon Lea, Unio: 1829, TAPS 3: 428, pl. 8, fig. 11; 1834, Obs. 1: 42 (Schuylkill [River] and Derby Creek [mostly in Delaware Co.], Pennsylvania). Figured type belonged to Mr. Mason, not in the USNM or ANSP [presumed lost]. Lea mentioned specimens in the possession of T. A. Conrad now ANSP 41004 and 41005.
- higginsii Lea, Unio: 1857, PANSP 9: 84 (Mississippi River, Muscatine [Muscatine Co.], Iowa); 1862, JANSP (2) 5: 188, pl. 24, fig. 258; 1863, Obs. 9: 10. Figured holotype USNM 84823.
- hildrethianus Lea, Unio: 1834, TAPS 5: 36, pl. 3, fig. 8; 1834, Obs. 1: 148 (Ohio [River] near Marietta [Washington Co., Ohio]). Figured type not in the USNM; syntypes ANSP 41826 mentioned as in the ANSP.
- hippopaeus Lea, Unio: 1845, PAPS 4: 163 (Lake Erie); 1848, TAPS 10: 67, pl. 1, fig. 1; 1848, Obs. 4: 41. Known only from the figured holotype USNM 84096.
- holstonensis Lea, Unio: 1840, PAPS 1: 288 (Holston River, Tennessee); 1842, TAPS 8: 212, pl. 14, fig. 27; 1842, Obs. 3: 50. Figured holotype USNM 84641.



- holstonia Lea, Margaritana: 1838, TAPS 6: 42, pl. 13, fig. 37  
(Holston River, [Tennessee]). 1838, Obs. 2: 42. Figured  
holotype USNM 86320.
- holtonis Lea, Anodonta: 1857, PANSP 9: 85 (near Cartago, New  
Grenada [Colombia]); 1857, JANSP (2) 3: 316, pl. 32, fig.  
31; 1857, Obs. 6: 36. Figured holotype USNM 86519.
- homsensis Lea, Unio: 1864, PANSP 16: 285 (Lake Homs, ancient  
Emesa, River Orontes, North Syria; Wheatley); 1868, JANSP  
(2) 6: 249, pl. 29, fig. 63; 1869, Obs. 12: 9. Figured  
holotype ANSP 125718 in the Wheatley colln.
- hopetonensis Lea, Unio: 1838, TAPS 6: 29, pl. 9, fig. 24  
([Altamaha River] Hopeton, near Darien, [McIntosh Co.,  
Georgia]); 1838, Obs. 2: 29. Figured holotype USNM 85391.
- housei Lea, Unio: 1856, PANSP 8: 92 (Siam); 1857, JANSP (2)  
3: 291, pl. 23, fig. 3; 1857, Obs. 6: 11. Figured  
holotype USNM 83951.
- houstonensis Lea, Unio: 1859, PANSP 11: 155 ([Houston River],  
Houston, [Harris Co.]; [Colorado River], Rutersville,  
[Fayette Co.], both Texas); 1860, JANSP (2) 4: 358, pl. 60,  
fig. 183; 1860, Obs. 8: 40. Figured holotype USNM 85768  
from the latter locality.

- humerosoides Lea, Unio: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31518, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J., p. 248, pl. 31, fig. 4. Is Elliptio complanata (Lightfoot).
- humerosus Lea, Unio: 1868, PANSP 20: 161 (Charlotte, Mecklenburg Co., North Carolina); 1868, JANSP (2) 6: 301, pl. 45, fig. 113; 1869, Obs. 12: 61. Figured holotype USNM 85414.
- humilis Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2) 3: 296, pl. 26, fig. 10; 1857, Obs. 6: 16. Figured holotype USNM 84153.
- hyalinus Lea, Unio: 1845, PAPS 4: 164 ([James River Drainage] Richmond [Henrico Co.], Virginia); 1848, TAPS 10: 69, pl. 2, fig. 4; 1848, Obs. 4: 43. Known only from the figured holotype USNM 86131.
- hydianus Lea, Unio: 1838, TAPS 6: 14, pl. 6, fig. 14 (Teche River [St. Landry Parish]; vicinity of New Orleans [Orleans Parish]; both Louisiana); 1838, Obs. 2: 14. Figured holotype USNM 85010 from the former locality.

inaequivalva Lea, Anodonta: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]); 1868, JANSP (2) 6: 292, pl. 43, fig. 108; 1869, Obs. 12: 52. Figured holotype USNM 86767.

incerta Lea, Anodonta: 1834, TAPS 5: 46, pl. 6, fig. 16 (Ohio River, near Cincinnati [Hamilton Co., Ohio]; T.G. Lea); 1834, Obs. 1: 158. Type not found in the USNM or ANSP, though mentioned as in the ANSP.

incrassatus Lea, Unio: 1840, PAPS 1: 286 (Chattahoochee River near Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 217, pl. 16, fig. 34; 1842, Obs. 3: 55. Figured holotype USNM 84537.

incurvus Lea, Unio: 1831, TAPS 4: 97, pl. 13, fig. 27 (Gibraltar); 1834, Obs. 1: 107. Figured holotype USNM 85731.

indefinitus Lea, Unio: 1863, PANSP 15: 192 (Long Creek, Mecklenburg Co.; Neuse River, near Raleigh [Wake Co.]; both North Carolina); 1866, JANSP (2) 6: 15, pl. 4, fig. 12; 1867, Obs. 11: 19. Figured holotype USNM 85388 from the former locality.

ineptus Lea, Unio: 1852, TAPS 10: 261, pl. 15, fig. 12 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 17. Known only from the figured holotype USNM 85326.

- inflata Lea, Symphynota: 1831, TAPS 4: 99, pl. 14, fig. 28;  
1834, Obs. 1: 109 (Alabama River). Figured holotype  
USNM 83909.
- infulgens Lea, Unio: 1874, PANSP for 1873, 25: 422 (Stewarts  
[Mill] Pond, Union Co., North Carolina); 1874, JANSP (2) 8:  
60: pl. 21, fig. 59; 1874, Obs. 13: 64. Figured holotype  
USNM 85403.
- infuscus Lea, Unio: 1872, PANSP 24: 159 (Fox River [not located];  
Irwins Creek, Mecklenburg Co.; both North Carolina);  
1874, JANSP (2) 8: 51, pl. 17, fig. 49; 1874, Obs. 13:  
55. Figured holotype USNM 85587 from the former locality.
- ingallsianus Lea, Unio: 1852, TAPS 10: 282, pl. 24, fig. 41  
(Siam); 1852, Obs. 5: 38. Figured holotype USNM 85933.
- inornatus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP  
(2) 3: 293, pl. 24, fig. 6; 1857, Obs. 6: 13. Figured  
holotype USNM 85196.
- insolidus Lea, Unio: 1872, PANSP 24: 159 (Irwins Creek, Mecklen-  
burg Co., North Carolina); 1874, JANSP (2) 8: 40, pl.  
13, fig. 37; 1874, Obs. 13: 44. Figured holotype USNM  
83974.
- instructus Lea, Unio: 1861, PANSP 13: 59 (Cahawba River,  
Alabama); 1861, JANSP (2) 5: 82, pl. 10, fig. 230; 1862,  
Obs. 8: 86. Known only from the figured holotype USNM 84640.

insulans Lea, Unio: 1857, PANSP 9: 86 (Roanoke River, Weldon [Halifax Co.], North Carolina); 1861, JANSP (2) 5: 53, pl. 1, fig. 199; 1862, Obs. 3: 57. Figured holotype USNM 85644.

intercedens Lea, Unio: 1857, PANSP 9: 32 (streams near Columbus [Muscogee Co.], Georgia); 1858, JANSP (2) 9: 77, pl. 15, fig. 57; 1858, Obs. 6: 77. Known only from the figured holotype USNM 85122.

interruptus Lea, Unio: 1838, TAPS 6: 15, pl. 6, fig. 15 (Harpeth River, Tennessee); 1838, Obs. 2: 15. Figured holotype USNM 84962.

interventus Lea, Unio: 1861, PANSP 13: 60 ( Cahawba River, Alabama); 1861, JANSP (2) 5: 84, pl. 11, fig. 233; 1862, Obs. 8: 83. Figured holotype USNM 84722.

inusitatus Lea, Unio: 1859, PANSP 11: 171 [as inusitatis] (Swift Creek, below Macon [Dobb Co.], Georgia); 1860, JANSP (2) 4: 333, pl. 52, fig. 158; 1860, Obs. 8: 15, corrected to inusitatus on errata sheet. Figured holotype USNM 85531.

invenustus Lea, Unio: 1874, PANSP for 1873, 25: 424 ([Chattahoochee River] Columbus [Muscogee Co.]; Russell Co.; both Georgia. Irwins Creek [Mecklenburg Co.], North Carolina); 1874, JANSP (2) 8: 66, pl. 22, fig. 62; 1874, Obs. 13: 70. Figured holotype USNM 85704 from the first locality.

iris Lea, Unio: 1829, TAPS 3: 439, pl. 11, fig. 18 (Ohio; T. G. Lea); 1834, Obs. 1: 53. Type [lost].

irrasus Lea, Unio: 1861, PANSP 13: 38 (Etowah River, Georgia); 1861, JANSP (2) 5: 91, pl. 13, fig. 239; 1862, Obs. 8: 95. Figured holotype USNM 84637.

irroratus Lea, Unio: 1828, TAPS 3: 269, pl. 5, fig. 5 (Ohio); 1834, Obs. 1: 11. Figured holotype USNM 84637.

irwinensis Lea, Unio: 1872, PANSP 24: 159 (Irwins Creek, [Mecklenburg Co.], North Carolina); 1874, JANSP (2) 8: 44, pl. 15, fig. 42; 1874, Obs. 13: 48. Figured holotype USNM 85680.

isocardiodes Lea, Plagiodon: 1856, PANSP 8: 79 (Rio Plata [Argentina]); 1857, JANSP (2) 3: 318, pl. 32, fig. 32; 1857, Obs. 6: 38. Figured holotype USNM 86326.

jamesianus Lea, Unio: 1857, PANSP 9: 84 ([Pearl River] Jackson, [Hinds Co.], Mississippi); 1858, JANSP (2) 4: 53, pl. 6, fig. 35; 1858, Obs. 6: 52. Known only from the figured holotype USNM 85365.

japanensis Lea, Unio: 1859, PANSP 11: 153 (Japan; Cuming); 1860, JANSP (2) 4: 244, pl. 36, fig. 123; 1860, Obs. 7: 62.

Figured holotype BMNH 1965181.

javanus Lea, Unio: 1840, PAPS 1: 285 (Java); 1842, TAPS 8: 220, pl. 18, fig. 37; 1842, Obs. 3: 58. Known only from the figured holotype USNM 85187.

javensis Lea, Unio: 1838, TAPS 6: 28, pl. 9, fig. 23 (Florida); 1838, Obs. 2: 28. Figured holotype USNM 86031, consists of a single valve.

jeffreysianus Lea, Unio: 1871, PANSP 23: 188 (Australia; restricted to Yarra River, Victoria by Iredale 1934, Australian Zool. 8: 60); 1874, JANSP (2) 8: 23, pl. 7, fig. 20; 1874, Obs. 13: 27. Figured holotype USNM 84849, refigured by McMichael and Hiscock 1958, Australian Jour. Marine and F.W. Res. 9: 392, pl. 1, figs. 3 - 5.

jejunus Lea, Unio: 1838, TAPS 6: 9, pl. 4, fig. 9 (Roanoke River [road between Winton and Tarborough, North Carolina]; [Wateree River], near Camden [Kershaw Co.], South Carolina); 1838, Obs. 2: 9. Figured holotype USNM 85475 from the latter locality.

jewettiana Lea, Anodonta: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]). Changed to:

jewettii Lea, Anodonta: 1868, JANSP (2) 6: 289, pl. 41, fig. 101; 1869, Obs. 12: 49. Known only from the figured holotype USNM 86681

jewettii Lea, Unio: 1867, PANSP 19: 81 (Sink of Noonan's [Newnans] Lake [Alachua Co.], Florida); 1868, JANSP (2) 6: 276, pl. 37, fig. 89; 1869, Obs. 12: 36. Figured holotype USNM 85374, refigured by Johnson, 1972, Bull. Florida State Mus. 16: 222, fig. 9 C.

johannis Lea, Unio: 1859, PANSP 11: 171 (Connasauga River and Etowah River; both Georgia. Alabama River [Tuscaloosa] = [Black Warrior River, Tuscaloosa, Tuscaloosa Co.], Alabama); 1860, JANSP (2) 4: 340, pl. 55, fig. 168; 1860, Obs. 8: 25. Figured holotype USNM 84830 from the third locality.

jonesii Lea, Unio: 1859, PANSP 11: 171 (Euharlee Creek, Georgia); 1860, JANSP (2) 4: 339, pl. 54, fig. 164; 1860, Obs. 8: 21. Figured holotype USNM 85267.

katherinae Lea, Unio: 1838, TAPS 6: 143 (not figured) (Lake Superior; Lady Katherine Douglas, St. Marys Isles, Scotland); 1838, Obs. 2: 143. Type retained by Lady Douglas.

keinerianus Lea, Unio: 1852, TAPS 10: 281, pl. 23, fig. 40 (Coosawattee River, Murray Co., Georgia); 1852, Obs. 5: 37. Figured holotype USNM 84273.



kennerlyi Lea, Anodonta: 1860, PANSP 12: 306 (Chiloweyuck Depot [not relocated], near Puget Sound, Washington); 1861, JANSP (2) 5: 108, pl. 18, fig. 256; 1862, Obs. 8: 112. Figured holotype USNM 86533.

kennicottii Lea, Anodonta: 1861, PANSP 13: 56 (Great Slave Lake at Fort Rae, [District of Mackenzie]; North end of Lake Winnipeg, [Manitoba]; both Canada); 1862, JANSP (2) 5: 214, pl. 33, fig. 283; 1863, Obs. 9: 36. Figured holotype USNM 86442 from the latter locality.

kirkii Lea, Unio: 1864: PANSP 16: 108 (Lake Nyassa, Central Africa); 1866, JANSP (2) 6: 32, pl. 12, fig. 30; 1867, Obs. 11: 36. Known only from the figured holotype USNM 84056.

kirtlandianus Lea, Unio: 1834, TAPS 5: 98, pl. 14, fig. 41 (Mahoning [River], Ohio); 1834, Obs. 1: 210. Figured holotype USNM 75815.

kleinianus Lea, Unio: 1852, TAPS 10: 265, pl. 17, fig. 18 (Suwanee [Suwannee] River, Florida); 1852, Obs. 5: 21. Figured holotype USNM 84041.

kraussii Lea, Unio: 1853, PANSP 6: 376. Substitute name for Castalia sulcata Krauss 1853 when Lea placed this in the genus Unio. Non Unio sulcata Lea 1829. Since put in Castaliella, which renders the change unnecessary.

kullethensis Lea, Unio: 1865, PANSP 16: 285 (near Mardin, in a stream from Kulleth, falling into the Tigris River [Iraq]); 1868, JANSP (2) 6: 251, pl. 29, fig. 65; 1869, Obs. 12: 11. Figured holotype USNM 85663.

lacrymosus Lea, Unio: 1828, TAPS 3: 272, pl. 6, fig. 8 (Ohio); 1834, Obs. 1: 14. Figured holotype USNM 84165.

lacteolus Lea, Unio: 1834, TAPS 5: 40, pl. 8, fig. 19 (Río de la Plata [Argentina]); 1834, Obs. 1: 152. Figured holotype returned to Hyde [lost]; paratype mentioned as in the ANSP [lost].

lacustris Lea, Anodonta: 1857, PANSP 9: 84 (Crooked Lake and Little Lakes, New York); 1860, JANSP (2) 4: 363, pl. 62, fig. 188; 1860, Obs. 8: 45. Figured holotype USNM 86597 labeled, Mohawk Region.

laevissima Lea, Symphynota: 1829, TAPS 3: 444, pl. 13, fig. 23 (Ohio); 1834, Obs. 1: 58. Figured holotype USNM 83938.

lanceolata Lea, Triquetra: 1856, PANSP 8: 79 (China?). Measured holotype USNM 83884. Changed by Lea to Triquetra contorta [as being more appropriate], 1856, PANSP 8: 301; 1857, JANSP (2) 3: 319, pl. 33, fig. 3; 1857, Obs. 6: 39. Figured specimen BMNH 196400 from Shanghai [China], Cuming colln.

lanceolatus Lea, Unio: 1828, TAPS 3: 266, pl. 3, fig. 2

(Tar River, Tarborough [Edgecombe Co.], North Carolina);

1834, Obs. 1: 8. Figured holotype USNM 85905.

lamarckianus Lea, Unio: 1852, TAPS 10: 266, pl. 17, fig. 20

(Caddo River; Washitta River near the Hot Springs [Garland Co.]; both Arkansas); 1852, Obs. 5: 22. Figured holotype USNM 84306 from White River Arkansas; from Shaeffer, who was mentioned in the description.

lamellatus Lea, Unio: 1838, TAPS 6: 19, pl. 6, fig. 16

(Bengal); 1838, Obs. 2: 19. Figured holotype USNM 85173

laosensis Lea, Unio: 1863, PANSP 15: 190 (Laos Mountains,

Cambodia, Siam); 1866, JANSP (2) 6: 63, pl. 21, fig. 61;

1867, Obs. 11: 67. Figured holotype USNM 86160.

latecostatus Lea, Unio: 1845, PAPS 4: 163 ([Black Warrior River]

Tuscaloosa [Tuscaloosa Co.], Alabama; B. W. Budd); 1848,

TAPS 10: 68, pl. 1, fig. 2; 1848, Obs. 4: 42. Type not in the USNM [lost].

latomarginata Lea, Anodonta: 1834, TAPS 5: 76, pl. 12, fig. 34

(River Parana [Argentina and Brazil]; Burrough); 1834,

Obs. 1: 188. Type not found in the USNM or ANSP, though mentioned by Lea as in the ANSP.

latus Lea, Unio: 1859, PANSP 11: 171 (Savannah River, near Savannah [Chatham Co.], Georgia); 1860, JANSP (2) 4: 334, pl. 53, fig. 159; 1860, Obs. 8: 16. Figured holotype USNM 85898.

lawii Lea, Unio: 1871, PANSP 23: 189 (Tennessee River, Tusculumbia [Colbert Co.], Alabama; Holston River, Tennessee); 1874, PANSP (2) 8: 8, pl. 2, fig. 4; 1874, Obs. 13: 12. Figured holotype USNM 84757 from the latter locality.

layardii Lea, Unio: 1859, PANSP 11: 153 (Ceylon; Cuming); 1860, JANSP (2) 4: 243, pl. 36, fig. 122; 1860, Obs. 7: 61. Known only from the figured holotype BMNH 1956159.

lazarus Lea, Unio: 1852, TAPS 10: 259, pl. 14, fig. 9 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 15. Figured holotype USNM 86155.

lecontianus Lea, Unio: 1838, TAPS 6: 40, pl. 12, fig. 35 (Canoochee River [Liberty Co.], Georgia); 1838, Obs. 2: 40. Figured holotype USNM 84852.

leibii Lea, Unio: 1862, PANSP 14: 168 ([Lake Erie] Erie Co. [sic] [Monroe Co.], Michigan); 1866, JANSP (2) 6: 44, pl. 15, fig. 42; 1867, Obs. 11: 48. Figured holotype USNM 84425 consists of one valve.

lenis Lea, Unio: 1840, PAPS 1: 286 (Stone's River, Tennessee).

Non Conrad 1840. Changed to:

lenior, Lea, Unio: 1842, TAPS 8: 204, pl. 12, fig. 18; 1842, Obs. 3: 42. Figured holotype USNM 86130.

lens Lea, Unio: 1831, TAPS 4: 80, pl. 8, fig. 10 (Ohio, T. G. Lea; Tennessee, Vanuxem); 1834, Obs. 1: 90. Type [lost].

lenticularis Lea, Anodonta: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]); 1868, JANSP (2) 6: 290, pl. 41, fig. 102; 1869, Obs. 12: 50. Known only from the figured holotype USNM 86704.

lenticularis Lea, Unio: 1872, PANSP 24: 155 (Tellico River, Monroe Co., Tennessee); 1874, JANSP (2) 8: 30, pl. 9, fig. 27; 1874, Obs. 13: 34. Figured holotype USNM 85761.

lentiformis Lea, Monocondylaea: 1866, PANSP 18: 34 (South America); 1868, JANSP (2) 6: 272, pl. 36, fig. 86; 1869, Obs. 12: 32. Known only from the figured holotype USNM 86335.

leonensis Lea, Anodonta: 1862, PANSP 14: 169 (Leon Co., Texas); 1866, JANSP (2) 6: 25, pl. 9, fig. 24; 1867, Obs. 11: 29. Figured holotype USNM 87806.

- lepidus Lea, Unio: 1860, PANSP 12: 91 (Uruguay River [Argentina and Uruguay]); 1863, JANSP (2) 5: 390, pl. 50, fig. 306; 1863, Obs. 10: 25. Figured holotype USNM 85624. Non Unio lepidus Gould 1856. Changed to:
- lepidior Lea, Margaron (Unio): 1870, Synopsis Unionidae, ed. 4, p. 53.
- lesleyi Lea, Unio: 1860, PANSP 12: 306 (Kentucky; [Cumberland River drainage near Murfreesboro, Rutherford Co.]; Tennessee); 1860, JANSP (2) 4: 353, pl. 58, fig. 177; 1860, Obs. 8: 34. Figured holotype USNM 84759, from the former locality.
- lesueurianus Lea, Unio: 1840, PAPS 1: 286 (Caney Fork [of the Cumberland River], and Holston River; both Tennessee); 1842, TAPS 8: 195, pl. 8, fig. 6; 1842, Obs. 3: 33. Figured holotype USNM 85803 from the latter locality.
- lewisii Lea, Anodonta: 1857, PANSP 9: 84 (Erie Canal; Mohawk River; [both] Herkimer Co.; Genesee River below Rochester [Monroe Co.]; all New York); 1860, JANSP (2) 4: 362, pl. 62, fig. 187; 1860, Obs. 8: 44. Figured holotype USNM 86595, from the Mohawk River.
- lewisii Lea, Unio: 1861, PANSP 13: 40 (Coosa River, Alabama); 1861, JANSP (2) 5: 71, pl. 8, fig. 220; 1862, Obs. 8: 75. Figured holotype USNM 85806.

ligamentinoides Lea, Unio: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31522, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J., p. 249, pl. 31, fig. 1. Is Actinonaias carinata (Barnes).

ligatus Lea, Unio: 1872, PANSP 24: 157 (Irwins Creek, Mecklenburg Co.; Long Creek, Gaston Co.; both North Carolina); 1874, JANSPP (2) 8: 49, pl. 17, fig. 47; 1874, Obs. 13: 53. Figured holotype USNM 85590 from the former locality.

lincecumii Lea, Unio: 1868, PANSP 20: 144 ([Trinity River], Dallas Co., Texas; Brazos River, Central Texas); 1868, JANSPP (2) 6: 312, pl. 49, fig. 125; 1869, Obs. 12: 72. Figured holotype USNM 84112 from the former locality.

lindslevi Lea, Unio: 1860, PANSP 12: 306 (Tennessee); 1860, JANSPP (2) 4: 351, pl. 58, fig. 176; 1860, Obs. 8: 33. Figured holotype USNM 84967.

lineatus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 206, pl. 12, fig. 20; 1842, Obs. 3: 44. Figured holotype USNM 84884.

Non Bory de St. Vincent 1827, changed to Lamossilis hi-  
nominatus Simpson, 1900, PUSNM 22: 526.

- linguaeformis Lea, Unio: 1860, PANSP 12: 305 ([Chattahoochee River] near Columbus, [Muscogee Co.], Georgia; French Broad River, Tennessee); 1860, JANSP (2) 4: 345, pl. 56, fig. 170; 1860, Obs. 8: 27. Figured holotype USNM 85259, from the former locality.
- linnaena Lea, Anodonta: 1852, TAPS 10: 289, pl. 27, fig. 51 (Lake Concordia [Concordia Parish], Louisiana); 1852, Obs. 5: 45. Known only from the figured holotype USNM 86702.
- litus Lea, Unio: 1871, PANSP 23: 189 (Cahaba River, Shelby Co., Alabama); 1874, JANSP (2) 8: 17, pl. 5, fig. 13; 1874, Obs. 13: 21. Figured holotype USNM 85142.
- livingstonensis Lea, Unio: 1863, PANSP 15: 192 (Livingston's Creek [NE Corner of Columbus Co.], Brunswick Co., North Carolina); 1866, JANSP (2) 6: 14, pl. 4, fig. 11; 1867, Obs. 11: 18. Figured holotype USNM 85536.
- locellus Lea, Unio: 1866, PANSP 18: 34 (Buenos Ayres, Argentina); 1868, JANSP (2) 6: 264, pl. 33, fig. 79; 1869, Obs. 12: 24. Known only from the figured holotype USNM 85189.
- lucidus Lea, Unio: 1863, PANSP 15: 192 (Livingston's creek, [NE corner of Columbus Co.], Brunswick Co., North Carolina); 1866, JANSP (2) 6: 9, pl. 2, fig. 6; 1867, Obs. 11: 13. Figured holotype USNM 85242.



lugubris Lea, Unio: 1838, TAPS 6: 30, pl. 9, fig. 25 ([Altamaha River] Hopeton, near Darien, [McIntosh Co., Georgia]); 1838, Obs. 2: 30, non Say 1832. Figured holotype USNM 85638.

luridus Lea, Unio: 1852, TAPS 10: 273, pl. 20, fig. 29 (Coosawattee River, Murray Co., Georgia); 1852, Obs. 5: 29. Figured holotype USNM 85253.

lutens Lea, Unio: 1856, PANSP 8: 93 (Newville [Tavoy], Burma; Vinton, Haines colln.). Changed to:

luteus Lea, Unio: 1857, JANSP (2) 3: 291, pl. 24, fig. 4; 1857, Obs. 6: 11. Known only from the figured type, returned to Haines; not in the AMNH [lost].

luteola Lea, Anodonta: 1858, PANSP 10: 118 (Isthmus of Darien [Panama]); 1860, JANSP (2) 4: 267, pl. 43, fig. 147; 1860, Obs. 7: 85. Known only from the figured holotype USNM 86766.

lyonii Lea, Unio: 1865, PANSP 17: 89 (near Cumberland Gap, East Tennessee); 1868, JANSP (2) 6: 259, pl. 32, fig. 74; 1869, Obs. 12: 19. Known only from the figured holotype USNM 85804.

macer Lea, Unio: 1857, PANSP 9: 86 (Roanoke River, Wheldon  
Halifax Co., North Carolina); 1862, JANSP (2) 5: 202,  
pl. 29, fig. 271; 1863, Obs. 9: 24. Figured holotype  
USNM 85425. The specimen listed as the type USNM 85427 by  
Johnson 1970, Bull. Mus. Comp. Zool. 140: 315 is a subse-  
quently identified specimen.

macnielii Lea, Unio: 1869, PANSP 21: 124 (Rio Gigillillo,  
Corcuera, Nicaragua); 1874, JANSP (2) 8: 25, pl. 8, fig.  
22; 1874, Obs. 13: 29. Figured holotype USNM 84414.

maconensis Lea, Unio: 1857, PANSP 9: 172 (Flint River, near  
Macon [County], Georgia); 1858, JANSP (2) 4: 93, pl. 20,  
fig. 73; 1858, Obs. 6: 93. Figured holotype USNM 86004.

macrodon Lea, Unio: 1859, PANSP 11: 154 ([Colorado River],  
Rutersville [Fayette Co.], Texas); 1862, JANSP (2) 5: 193,  
pl. 26, fig. 262; 1863, Obs. 9: 15. Figured holotype  
USNM 25711.

maestus Lea, Unio: 1841, PAPS 2: 82 (French Broad River,  
East Tennessee); 1842, TAPS 8: 244, pl. 26, fig. 60;  
1842, Obs. 3: 82. Figured holotype USNM 85320.

magnifica Lea, Symphynota: 1834, TAPS 5: 42, pl. 5, fig. 14  
(China); 1834, Obs. 1: 155. Figured holotype USNM 86379.

- mardinensis Lea, Monocondylaea: 1865, PANSP 16: 286 (near Mardin, in a stream falling into the Tigris River [Iraq]); 1869, JANSP (2) 6: 252, pl. 30, fig. 67; 1869, Obs. 12: 12. Figured holotype USNM 86354.
- mardinensis Lea, Unio: 1865, PANSP 16: 286 (Tigris River, near Mardin [Iraq]); 1868, JANSP (2) 6: 252, pl. 30, fig. 66; 1869, Obs. 12: 12. Figured holotype USNM 85664.
- marginis Lea, Unio: 1865, PANSP 17: 89 (Blue Springs [Albany] Dougherty Co., Georgia); 1868 JANSP (2) 6: 255, pl. 31, fig. 69; 1869, Obs. 12: 15. Figured holotype USNM 85295.
- marryattana Lea, Anodonta: 1840, PAPS 1: 289 ([Lake Winnebago] vicinity of Fort Winnebago [Winnebago Co., Wisconsin]); 1842, TAPS 8: 226, pl. 20, fig. 45; 1842, Obs. 3: 64. Known only from the figured holotype 86706.
- mauritianus Lea, Unio: 1859, PANSP 11: 152 (Island of Mauritius); 1860, JANSP (2) 4: 257, pl. 40, fig. 138; 1860, Obs. 7: 75. Known only from the figured holotype BMNH 1965157.
- mecklenbergensis Lea, Unio: 1863, PANSP 15: 191 (near Charlotte, Mecklenberg Co., North Carolina); 1866, JANSP (2) 6: 17, pl. 5, fig. 15; 1867, Obs. 11: 21. Figured holotype USNM 85419.

- medellinus Lea, Unio: 1838, TAPS 6: 39, pl. 12, fig. 34 (River Medellin, near Vera Cruz [Vera Cruz State], Mexico; Burrough); 1838, Obs. 2: 39. Figured holotype ANSP 9679; paratype mentioned as in the Lea colln. [lost].
- mediocris Lea, Unio: 1863, PANSP 15: 192 (Neuse River, near [6 mi E] Raleigh, [Wake Co.], North Carolina: 1866, JANSP (2) 6: 24, pl. 7, fig. 22; 1867, Obs. 11: 28. Figured holotype USNM 85611.
- medius Lea, Unio: 1861, PANSP 13: 40 (near Coosa River, Alabama); 1861, JANSP (2) 5: 78, pl. 10, fig. 227; 1862, Obs. 8: 82. Figured holotype USNM 84794.
- melleus Lea, Unio: 1859, PANSP 11: 152 (Hab.?, Cuming; Central America, teste Simpson); 1860, JANSP (2) 4: 250, pl. 38, fig. 129; 1860, Obs. 7: 68. Known only from the figured holotype BMNH 1965175.
- menkianus Lea, Unio: 1838, TAPS 5: 76, pl. 19, fig. 59 (Harpeth River, Tennessee); 1838, Obs. 2: 76. Figured holotype USNM 84965.
- mercerii Lea, Unio: 1862, PANSP 14: 169 (Lee Co., [Flint River drainage], Georgia); 1862, JANSP (2) 5: 209, pl. 31, fig. 278; 1863, Obs. 9: 31. Figured holotype USNM 86057.

- meredithii Lea, Unio: 1858, PANSP 10: 40 (Tennessee River, Tusculmbia, [Colbert Co.], Alabama); 1861, JANSP (2) 5: 65, pl. 6, fig. 214; 1862, Obs. 8: 69. Figured holotype USNM 84393.
- merus Lea, Unio: 1852, TAPS 10: 260, pl. 15, fig. 10 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 16. Figured holotype USNM 85698.
- micans Lea, Unio: 1857, PANSP 9: 85 (Catawba River, Gaston Co.; Deep River; both North Carolina); 1861, JANSP (2) 5: 59, pl. 3, fig. 207; 1862, Obs. 8: 63. Holotype USNM 85077 from the former locality.
- minor Lea, Margaritana: 1845, PAPS 4: 166 (Tennessee; North Carolina); 1848, TAPS 10: 82, pl. 8, fig. 26; 1848, Obs. 4: 56. Figured holotype USNM 86224 from the latter locality.
- minor Lea, Unio: 1843, Desc. Twelve Uniones (Lake Monroe and Lake George, Florida); 1846, TAPS 9: 276, pl. 39, fig. 3; 1848, Obs. 4: 34. Figured holotype USNM 85310 from the latter locality.
- modesta Lea, Anodonta: 1857, PANSP 9: 84 (Pond near Kalamazoo [Kalamazoo Co.], Michigan); 1860, JANSP (2) 4: 364, pl. 63, fig. 189; 1860, Obs. 8: 46. Known only from the figured holotype USNM 86534.

- modesta Lea, Spatha: 1864, PANSP 16: 109 (near Mozambique, Africa); 1866, JANSP (2) 6: 27, pl. 13, fig. 35; 1867, Obs. 11: 41. Known only from the figured holotype USNM 86779.
- modicellus Lea, Unio: 1859, PANSP 11: 171 (Connasauga River; Chattanooga River; both Georgia); 1860, JANSP (2) 4: 347, pl. 57, fig. 172; 1860, Obs. 8: 29. Figured holotype USNM 84841 from the former locality.
- modicus Lea, Unio: 1857, PANSP 9: 171 (Chattahoochee River, near Columbus [Muscogee Co.], Georgia); 1859, JANSP (2) 4: 204, pl. 24, fig. 86; 1859, Obs. 7: 22. Figured holotype USNM 84787.
- modioliformis Lea, Unio: 1834, TAPS 5: 97, pl. 13, fig. 40 (Santee Canal, South Carolina); 1834, Obs. 1: 209. Figured holotype USNM 85029 [differs slightly from the figure].
- monroensis Lea, Unio: 1843, Desc. Twelve Uniones (Lake Monroe, Florida); 1846, TAPS 9: 279, pl. 41, fig. 8; 1848, Obs. 4: 37. Known only from the figured holotype USNM 85169.
- montezuma Lea, Anodonta: 1841, PAPS 2: 31 (Central America; Jay); 1842, TAPS 8: 240, pl. 23, fig. 55; 1842, Obs. 3: 78. Known only from the figured type, not in the USNM or AMNH [lost].

mooresianus Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River]  
Tuscumbia [Colbert Co.], Alabama); 1866, JANSP (2) 6:  
39, pl. 14, fig. 37; 1867, Obs. 11: 43. Figured holotype  
USNM 84695.

moricandii Lea, Anodonta: 1860, PANSP 12: 90 (Bahia, Brazil);  
1863, JANSP (2) 5: 396, pl. 49, fig. 303; 1863, Obs. 10:  
32. Figured holotype USNM 86695.

mortoniana Lea, Anodonta: 1834, TAPS 5: 80, pl. 13, fig. 37  
(River Parana [Argentina]; Burrough); 1834, Obs. 1: 192.  
Known only from the figured type in the ANSP [lost].

mosulensis Lea, Unio: 1863, PANSP 15: 190 (River Tigris, Mosul  
[Iraq]); 1866, JANSP (2) 6: 52, pl. 17, fig. 49; 1867,  
Obs. 11: 56. Figured holotype USNM 85230.

mouhoti Lea, Monocondylaea: 1863, PANSP 15: 190 (Laos  
Mountains, Cambodia). Changed to:

mouhotiana Lea, Monocondylaea: 1866, JANSP (2) 6: 65, pl. 21,  
fig. 62; 1867, Obs. 11: 69. Figured holotype USNM 86339.

moussonianus Lea, Unio: 1852, TAPS 10: 268, pl. 18, fig. 22  
(Georgia); 1852, Obs. 5: 24. Figured holotype USNM 85163.

muhlfeldianus Lea, Unio: 1838, TAPS 6: 41, pl. 12, fig. 36  
(Cumberland River, Tennessee); 1838, Obs. 2: 41. Figured  
holotype USNM 85262.

multiplicatus Lea, Unio: 1831, TAPS 4: 70, pl. 4, fig. 2

(Tennessee River, Vanuxem; Ohio River, T. G. Lea); 1834,  
Obs. 1: 80. Type [lost].

multiradiatus Lea, Unio: 1829, TAPS 3: 434, pl. 9, fig. 15

(Ohio); 1834, Obs. 1: 48. Figured holotype USNM 84930.

multistriatus Lea, Unio: 1831, TAPS 4: 91, pl. 12, fig. 22

(Brazil; Mawe); 1834, Obs. 1: 101. USNM 84114 agrees with  
the figure and may be the type, though it is labeled, "Rio  
Joanes, near Bahia, Brazil; Moricand."

mundus Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River] Tuscumbia

[Colbert Co.], Alabama); 1866, JANSP (2) 6: 40, pl. 14,  
fig. 38; 1867, Obs. 11: 44. Figured holotype USNM 84767.

murchisonianus Lea Unio: 1834, TAPS 5: 33, pl. 3, fig. 6

(China; Murchison [shell and label marked, Calcutta,  
India; Murchison]); 1834, Obs. 1: 145. Figured holotype  
USNM 84156.

murrayensis Lea, Unio: 1868, PANSP 20: 143 (Connesauga Creek,

Whitfield Co.; Etowah River; both Georgia); 1868, JANSP  
(2) 6: 303, pl. 46, fig. 115; 1869, Obs. 12: 62. Figured  
holotype USNM 84769 from the former locality.



mutabilis Lea, Unio: 1859, PANSP 11: 152 (Brisbane water, Australia; New Zealand; Murray River, Australia); 1860 JANSPP (2) 4: 248, pl. 38, fig. 127; 1860, Obs. 7: 66. Lectotype BMNH 1965153 selected by Johnson, 1971, Bull. British Mus. Nat. Hist. 20: 89 from Brisbane water, figured by Reeve, 1865, Conch. Iconica, 16, Unio, pl. 24, species 112. It was refigured by McMichael and Hiscock, 1958, Australian Jour. Marine and F. W. Res. 9: 449, pl. 11, fig. 11; paralectotype USNM 85815, Ibid., pl. 11, figs. 8, 9; paralectotype USNM 84405 from Murray River.

myersianus Lea, Unio: 1856, PANSP 8: 92 (Siam); 1857, JANSPP (2) 3: 290, pl. 22, fig. 2; 1857, Obs. 6: 10. Figured holotype USNM 83950.

nagpoorensis Lea, Unio: 1859, PANSP 11: 331 (Ambajiri Tank, Nagpoor, Bengal; Wheatley); 1860, JANSPP (2) 4: 270, pl. 45, fig. 150; 1860, Obs. 7: 88. Figured holotype ANSP 125504 mentioned as in the Wheatley colln.

napoensis Lea, Anodonta: 1868, PANSP 20: 162 (Napo River, Ecuador); 1868, JANSPP (2) 6: 324, pl. 53, fig. 137; 1869, Obs. 12: 84. Figured holotype USNM 25429 consists of two odd valves.

nashvillianus Lea, Unio: 1834, TAPS 5: 100, pl. 14, fig. 43  
 (Cumberland River [Tennessee]; Ohio [River] Louisville  
 [Jefferson Co.] Kentucky); 1834, Obs. 1: 212. Figured  
 holotype USNM 85114 from the former locality.

nasutilus Lea, Unio: 1863, PANSP 15: 192 (Livingston's Creek  
 [N E corner of Columbus Co.], Brunswick Co., North Carolina);  
 Changed to:

nasululus Lea, Unio: 1866, JANSP (2) 6: 12, pl. 3, fig. 9;  
 1867, Obs. 11: 16. Figured holotype USNM 86027.

nasutoides Lea, Unio: 1868, PANSP 20: 163 ([Fish-house], 6 mi.  
 NE Camden, [Camden Co.], New Jersey; Pleistocene, teste  
 Pilsbry, 1896 PANSP 48: 567-570). Measured type ANSP 31523.  
 Specimen figured by Whitfield, 1885, Brach. and Lamell.  
 Raritan Clays and Greensand Marls of N.J., p. 244, pl. 34,  
 figs. 4, 5. Is Elliptio lanceolata (Lea).

natalensis Lea, Spatha: 1864, PANSP 16: 113 (Umpingave River,  
 Port Natal, South Africa); 1866, JANSP (2) 6: 64, pl. 20,  
 fig. 58; 1867, Obs. 11: 68. Figured holotype USNM 86778.

natalensis Lea, Unio: 1864, PANSP 16: 113 (Umpingave River,  
 Port Natal, South Africa; J. McKen); 1866, JANSP (2) 6:  
 59, pl. 20, fig. 57; 1867, Obs. 11: 63. Figured holotype  
 ANSP 41686 from McKen mentioned as in the ANSP.

- naviculoides Lea, Unio: 1857, PANSP 9: 170 (Buckhead Creek, Burke Co., Georgia) ; 1858, JANSP (2) 4: 94, pl. 20, fig. 74; 1858, Obs. 6: 94. Figured holotype USNM 86005.
- navigioliformis Lea, Unio: 1859, PANSP 11: 152 (Hab.? [South Africa]; Cuming); 1860, JANSP (2) 4: 248, pl. 37, fig. 124; 1860, Obs. 7: 63. Known only from the figured type, not in BMNH or USNM [lost].
- negatus Lea, Unio: 1861, PANSP 13: 59 (Big Prairie Creek, [Hale Co.], Alabama; [Tombigbee River] Columbus [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 76, pl. 9, fig. 225; 1862, Obs. 8: 80. Figured holotype USNM 84382 from the former locality.
- neglectus Lea, Unio: 1843, Desc. Twelve Uniones (North Alabama); 1846, TAPS 9: 280, pl. 42, fig. 10; 1848, Obs. 4: 38. Known only from the figured holotype USNM 85701.
- neislerii Lea, Unio: 1858, PANSP 10: 165 (Flint River, Lanier [was about 10 mi N Oglethorpe, Macon Co.]; Flint River, Macon [County]; both Georgia); 1859, JANSP (2) 4: 212, pl. 26, fig. 93; 1859, Obs. 7: 30. Figured holotype USNM 83993.

newcombianus Lea, Unio: 1856, PANSP 8: 103 (Lake Nicaragua, Central America); 1857, JANSP (2) 3: 312, pl. 30, fig. 27; 1857, Obs. 6: 32. Figured type not in the USNM; syntypes ANSP 126425 mentioned as in the Wheatley colln., 2 syntypes in the Newcomb colln., Cornell University, Ithaca, New York.

newtoniensis Lea, Anodonta: 1838, TAPS 6: 79, pl. 21, fig. 66 (Newtown [Newton] Creek, [Camden Co.], New Jersey [opposite] Philadelphia; Schuylkill [River] Fairmount [Philadelphia, Philadelphia Co., Pennsylvania]); 1838, Obs. 2: 79. Figured type lost, lectotype USNM 86561 selected by Johnson, 1946, Occ. Papers on Moll., 1: 112, figured by Johnson 1970, Bull. Mus. Comp. Zool. 140: 361, pl. 15, fig. 4, from the latter locality.

neusensis Lea, Unio: 1858, PANSP 10: 41 (Neuse River, 6 mi. from [East] Raleigh [Wake Co.], North Carolina); 1861, JANSP (2) 5: 60; 1862, Obs. 8: 64. Figured holotype USNM 85465.

nicaraguensis Lea, Unio: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSP (2) 6: 296, pl. 43, fig. 107; 1869, Obs. 12: 56. Figured holotype USNM 84390.

- nickliniana Lea, Unio: 1834, TAPS 5: 28, pl. 1, fig. 1  
(China [Moctezuma River, Central America]); 1834, Obs. 1:  
140. Figured holotype USNM 83898 consists of a single  
valve.
- nigellus Lea, Unio: 1852, TAPS 10: 283, pl. 24, fig. 42  
(Chattahoochee River, near Columbus [Muscogee Co.]  
Georgia); 1852, Obs. 5: 39. Known only from the figured  
holotype USNM 85567.
- nigerrimus Lea, Unio: 1852, TAPS 10: 268, pl. 18, fig. 23  
([Red River] Alexandria [Rapides Parish], Louisiana);  
1852, Obs. 5: 24. Figured holotype USNM 85307.
- nigrinus Lea, Unio: 1852, TAPS 10: 284, pl. 24, fig. 44  
(West Florida); 1852, Obs. 5: 40. Known only from the  
figured holotype USNM 86132.
- nitens Lea, Unio: 1840, PAPS 1: 288 (Long Creek, Cocke Co.,  
Tennessee); 1842, TAPS 8: 205, pl. 12, fig. 19; 1842,  
Obs. 3: 43. Figured holotype USNM 85132.
- nocturnus Lea, Unio: 1860, PANSP 12: 91 (Uruguay River, [Argen-  
tina and Uruguay]); 1863, JANSP (2) 5: 380, pl. 42, fig.  
288; 1863, Obs. 10: 16. Figured holotype USNM 85782.

- northamptonensis Lea, Unio: 1861, PANSP 13: 392 (Connecticut River, [Hampshire Co.]; [Connecticut River], Springfield, [Hampden Co.]; both Massachusetts. [Connecticut River] below Hartford, [Hartford Co.], Connecticut. Neuse River, North Carolina); 1862, JANSP (2) 5: 190, pl. 25, fig. 260; 1863, Obs. 9: 12. Figured holotype USNM 85527 from the first locality.
- notatus Lea, Unio: 1838, TAPS 6: 28, pl. 8, fig. 22 (Cumberland River, [Tennessee]); 1838, Obs. 2: 28. Figured holotype USNM 85075.
- novieboraci Lea, Unio: 1838, TAPS 6: 104, pl. 24, fig. 114 (Oak Orchard Creek, Orleans Co., New York); 1838, Obs. 2: 104. Figured holotype USNM 86042.
- nubilus Lea, Unio: 1868, PANSP 20: 161 (Paw Creek, Mecklenburg Co., North Carolina); 1868, JANSP (2) 6: 298, pl. 44, fig. 110; 1869, Obs. 12: 58. Figured holotype USNM 85417.
- nucleus Lea, Unio: 1856, PANSP 8: 94 (Siam); 1857, JANSP (2) 3: 306; 1857, Obs. 6: 26. Figured holotype USNM 533741.
- nuttalliana Lea, Anodonta: 1838, TAPS 6: 77, pl. 20, fig. 62 (Wahlamet [Willamette River], near its junction with the Columbia River [Oregon]); 1838, Obs. 2: 77. Figured holotype USNM 86391.

nuttallianus Lea, Unio: 1856, PANSP 8: 103 (India); 1857,

JANSP (2) 3: 310, pl. 30, fig. 25; 1857, Obs. 6: 30.

Figured holotype USNM 85201.

nux Lea, Unio: 1852, TAPS 10: 283, pl. 24, fig. 43; 1852,

Obs. 5: 39. (Alabama River). Figured holotype USNM 85316.

nyassaensis Lea, Spatha: 1864, PANSP 16: 109 (Lake Nyassa,

Central Africa); 1866, JANSP (2) 6: 36, pl. 13, fig. 33;

1867, Obs. 11: 40. Known only from the figured holotype

USNM 86777.

nyassaensis Lea, Unio: 1864, PANSP 16: 108 (Lake Nyassa,

Central Africa); 1866, JANSP (2) 6: 33, pl. 12, fig. 32;

1867, Obs. 11: 37. Known only from the figured holotype

USNM 84057.

obesus Lea, Unio: 1831, TAPS 4: 96, pl. 13, fig. 26 (Little

Ogeechee River [Hancock Co.], Georgia); 1834, Obs. 1: 106.

Figured holotype USNM 85366. The type locality is

discussed by Johnson, 1970, Bull. Mus. Comp. Zool. 140:

339.

obfuscus Lea, Unio: 1857, PANSP 9: 172 (Flint River, near Macon

[County], Georgia); 1859, JANSP (2) 4: 197, pl. 22, fig.

80; 1859, Obs. 7: 15. Figured holotype USNM 85089.

- oblatus Lea, Unio: 1863, PANSP 15: 193 [as ablatus] (Long Creek, Gaston Co., North Carolina); 1866, JANSP (2) 6: 13, pl. 4, fig. 10; 1867, Obs. 11: 17. Figured holotype USNM 86001.
- oblita Lea, Anodonta: 1852, TAPS 10: 290, pl. 28, fig. 52 (Campbell Co., East Tennessee); 1852, Obs. 5: 46. Figured holotype USNM 86536.
- oblongus Lea, Unio: 1872, PANSP 24: 158 (Irwins Creek, Mecklenburg Co., North Carolina); 1874, JANSP (2) 8: 52, pl. 18, fig. 50; 1874, Obs. 13: 56. Figured holotype USNM 85572.
- obnubilus Lea, Unio: 1857, PANSP 9: 169 (Buckhead Creek, Burke Co., Georgia); 1858, JANSP (2) 4: 84, pl. 17, fig. 64; 1858, Obs. 6: 84. Figured holotype USNM 85646.
- obscurus Lea, Unio: 1838, TAPS 6: 7, pl. 3, fig. 7 (near Nashville [Davidson Co.], Tennessee); 1838, Obs. 2: 7. Figured holotype USNM 85128.
- obtusus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 201, pl. 11, fig. 13; 1842, Obs. 3: 39. Figured holotype USNM 86142.



obuncus Lea, Unio: 1871, PANSP 23: 192 (Tennessee River, Tusculumbia [Colbert Co.], Alabama; Holston River, East Tennessee); 1874, JANSP (2) 8: 9, pl. 2, fig. 5; 1874 Obs. 13: 13. Figured holotype USNM 84698 from the latter locality.

occatus Lea, Unio: 1860, PANSP 12: 307 (Bengal); 1863, JANSP (2) 6: 398, pl. 50, fig. 304; 1863, Obs. 10: 34. Figured holotype USNM 84077.

occidens Lea, Unio: 1829, TAPS 3: 435, pl. 10, fig. 16 (Ohio); 1834, Obs. 1: 49. Figured holotype USNM 84866.

occultus Lea, Unio: 1843, Desc. Twelve Uniones (Black Creek and Lake Monroe, Florida); 1846, TAPS 9: 279, pl. 41, fig. 7; 1848, Obs. 4: 37. Figured holotype USNM 85243 from the former locality.

ocmulgeensis Lea, Unio: 1861, PANSP 13: 38 (Little Ocmulgee River, Lumber City, [Telfair Co.], Georgia); 1861, JANSP (2) 5: 95, pl. 14, fig. 243; 1862, Obs. 8: 99. Known only from the figured holotype USNM 85901.

olivarius Lea, Unio: 1831, TAPS 4: 108, pl. 16, fig. 38 (Burrell River, India; Burrough); 1834, Obs. 1: 118. Figured type not in the USNM or ANSP; syntypes ANSP 41742 and 41679 mentioned as in the ANSP.

- opaca Lea, Anodonta: 1852, TAPS 10: 285, pl. 25, fig. 46  
(near New Orleans [Orleans Parish, Louisiana]; [Arkansas River], Little Rock, [Pulaski Co.], Arkansas); 1852, Obs. 5: 41. Figured holotype USNM 128835.
- opacus Lea, Unio: 1857, PANSP 9: 169 (Buckhead Creek, Burke Co., Georgia); 1858, JANSP (2) 4: 86, pl. 18, fig. 66; 1858, Obs. 6: 86. Figured holotype USNM 85546.
- oregonensis Lea, Anodonta: 1838, TAPS 6: 80, pl. 21, fig. 67 (Wahlamet [Willamette River] near its junction with the Columbia River, [Oregon]); 1838, Obs. 2: 80. Figured holotype USNM 86432.
- oregonensis Lea, Unio: 1852, TAPS 10: 275, pl. 22, fig. 33 (Columbia River, Oregon [Nicaragua, teste C. T. Simpson]); 1852, Obs. 5: 31. Figured holotype USNM 85073.
- oriens Lea, Unio: 1831, TAPS 4: 73, pl. 6, fig. 5 (Ohio River); 1834, Obs. 1: 83. Figured holotype USNM 86271.
- orientalis Lea, Unio: 1840, PAPS 1: 285 (Java); 1842, TAPS 8: 221, pl. 18, fig. 38; 1842, Obs. 3: 59. Figured holotype USNM 86058.
- ornatus Lea, Unio: 1861, PANSP 13: 41 (Alabama?); 1861, JANSP (2) 5: 85, pl. 11, fig. 234; 1862, Obs. 8: 89. Known only from figured holotype USNM 85854.

orontesensis Lea, Unio: 1863, PANSP 15: 190 (River Orontes, Syria); 1866, JANSP (2) 6: 53, pl. 18, fig. 50; 1866, Obs. 11: 57. Figured holotype USNM 85535.

orphaensis Lea, Unio: 1864, PANSP 16: 285 (Tigris River, near Mardin, Pashalic of Orpha, Asiatic Turkey [Iraq]); 1868, JANSP (2) 6: 250, pl. 29, fig. 64; 1869, Obs. 12: 10. Figured holotype USNM 85603.

ortonii Lea, Unio: 1868, PANSP 20: 161 (River Napo, Ecuador); 1868, JANSP (2) 6: 321, pl. 52, fig. 134; 1869, Obs. 12: 81. Known only from the figured holotype USNM 703563 which consists of a single right valve.

othcaloogensis Lea, Unio: 1857, PANSP 9: 32 (Othcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 74, pl. 14, fig. 54; 1858, Obs. 6: 74. Figured holotype USNM 84615.

ovata Lea, Anodonta: 1838, TAPS 6: 2, pl. 2, fig. 2 (near Marietta [Washington Co.] Ohio); 1838, Obs. 2: 2. Figured holotype USNM 86615.

pallesens Lea, Unio: 1845, PAPS 4: 164 ([Black Warrior River] Tuscaloosa [Tuscaloosa Co.], Alabama); 1848, TAPS 10: 79, pl. 7, fig. 20; 1848, Obs. 4: 53. Known only from the figured holotype USNM 84958.

- pallidofulvus Lea, Unio: 1861, PANSP 13: 60 (Cahawba River, Alabama); 1861, JANSP (2) 5: 83, pl. 11, fig. 232; 1862, Obs. 8: 87. Figured holotype USNM 84721.
- paraguayensis Lea, Unio: 1866, PANSP 18: 34 (Paraguay); 1868, JANSP (2) 6: 271, pl. 35, fig. 85; 1869, Obs. 12: 31. Known only from the figured holotype USNM 85068.
- parallelopipedon Lea, Unio: 1834, TAPS 5: 60, pl. 8, fig. 20 (Parana River, Province of Corrientes [Argentina]); 1834, Obs. 1: 172. Figured holotype USNM 85928.
- paramattensis Lea, Unio: 1862, PANSP 14: 176 (Parramatta River, [Parramatta] New South Wales, Australia); 1866, JANSP (2) 6: 60, pl. 20, fig. 59; 1867, Obs. 11: 64. Figured holotype USNM 84405, refigured by McMichael and Hiscock 1958, Australian Jour. Marine and F. W. Res. 9: 450, pl. 11, figs. 6-8.
- paranensis Lea, Unio: 1834, TAPS 5: 99, pl. 14, fig. 42 (River Parana [Argentina]; Burrough); 1834, Obs. 1: 211. Figured type not in the USNM or ANSP; syntypes ANSP 41798.
- parcus Lea, Unio: 1866, PANSP 18: 34 (South America); 1868, JANSP (2) 6: 262, pl. 33, fig. 77; 1869, Obs. 12: 22. Known only from the figured holotype USNM 85198.

parvulus Lea, Unio: 1860, PANSP 12: 307 (Coosa River, Alabama; [Tennessee River] Chattanooga, Georgia [sic] [James Co., Tennessee]); 1866, JANSP (2) 6: 45, pl. 16, fig. 43; 1867, Obs. 11: 49. Figured holotype USNM 84139 from the latter locality.

patelloides Lea, Unio: 1860, PANSP 12: 89 (Amazon River, Brazil; Rio Plata [Argentina]); 1863, JANSP (2) 5: 383, pl. 43, fig. 291; 1863, Obs. 10: 19. Figured holotype USNM 85780.

pattinoides Lea, Unio: 1871, PANSP 23: 193 (Clinch River [Virginia]; Holston River [Tennessee]); 1874, JANSP (2) 8: 16, pl. 4, fig. 12; 1874, Obs. 13: 20. Figured holotype USNM 84763 from the latter locality.

patulus Lea, Unio: 1829, TAPS 3: 441, pl. 12, fig. 20 (Ohio); 1834, Obs. 1: 55. Figured holotype USNM 84760; teste Morrison, 1943, Nautilus 57: 16.

pauciplicatus Lea, Unio: 1872, PANSP 24: 156 ([Colorado River] Austin, [Travis Co.], Texas ); 1874, JANSP (2) 8: 29, pl. 9, fig. 26; 1874, Obs. 13: 33. Figured holotype USNM 84111.

paulus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 213, pl. 15, fig. 29; 1842, Obs. 3: 51. Figured holotype USNM 85274.

pauperculus Lea, Unio: 1861, PANSP 13: 39 (Stream near Columbus, [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 99, pl. 15, fig. 247; 1862, Obs. 8: 103. Figured holotype USNM 85763.

pavonia Lea, Anodonta: 1838, TAPS 6: 78, pl. 21, fig. 65 (Headwaters of the Little Beaver [River, Lawrence Co.], Ohio); 1838, Obs. 2: 78. Figured holotype USNM 86514.

pawensis Lea, Unio: 1868, PANSP 20: 161 (Paw Creek [Mecklenburg Co.], Beaver Co. [= Creek, Gaston Co.], Catawba Run [Gaston and Mecklenburg Cos.] all North Carolina); 1868, JANSP (2) 6: 302, pl. 45, fig. 114; 1869, Obs. 12: 62. Figured holotype USNM 85380 labeled "Beaver Creek, [into ? ] Catawba Run, North Carolina".

pazii Lea, Anodonta: 1866, PANSP 18: 35 (South America); 1868, JANSP (2) 6: 274, pl. 36, fig. 87; 1869, Obs. 12: 34. Figured holotype USNM 86703.

pazii Lea, Monocondylaea: 1866, PANSP 18: 34 (South America); 1868, JANSP (2) 6: 273, pl. 36, fig. 88; 1869, Obs. 12: 33. Figured holotype USNM 86342.

pazii Lea, Unio: 1862, PANSP 14: 176 (China; Siam); 1866, JANSP (2) 6: 61, pl. 21, fig. 60; 1867, Obs. 11: 65. Figured holotype USNM 84708 from the former locality.

- pealei Lea, Unio: 1871, PANSP 23: 191 (Kansas); 1874, JANSP (2) 8: 26, pl. 8, fig. 23; 1874, Obs. 13: 30. Known only from the figured holotype USNM 85745, mentioned as in the ANSP, but not returned.
- peculiaris Lea, Unio: 1866, PANSP 18: 33 (South America); 1868, JANSP (2) 6: 265, pl. 34, fig. 80; 1869, Obs. 12: 25. Figured holotype USNM 85190.
- pellucidus Lea, Unio: 1845, PAPS 4: 163 (Chattahoochee River, Georgia; Le Conte); 1848, TAPS 10: 70, pl. 2, fig. 6; 1848, Obs. 4: 44. Known only from the figured holotype ANSP 56493 from Le Conte.
- penicillatus Lea, Unio: 1857, PANSP 9: 171 (Chattahoochee River, near Columbus [Muscogee Co.]; Chattahoochee River, near Atlanta [De Kalb Co.]; Flint River, near Albany [Dougherty Co.], all Georgia); 1859, JANSP (2) 4: 203, pl. 23, fig. 85; 1859, Obs. 7: 21. Figured holotype USNM 84142 from the third locality.
- pepinianus Lea, Anodonta: 1838, TAPS 6: 96, pl. 16, fig. 51 (Lake Pepin, Portage Co., Ohio); 1838, Obs. 2: 96. Figured holotype USNM 86440.
- peraeformis Lea, Unio: 1860, PANSP 12: 90 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 384, pl. 43, fig. 292; 1863, Obs. 10: 20. Figured holotype USNM 85774.

- percoarctatus Lea, Unio: 1857, PANSP 9: 85 (Catawba River, Gaston Co., North Carolina); 1861, JANSP (2) 5: 59, pl. 3, fig. 206; 1862, Obs. 8: 63. Figured holotype USNM 85529.
- perdix Lea, Unio: 1834, TAPS 5: 72, pl. 11, fig. 31 (Harpeth River, Tennessee); 1834, Obs. 1: 184. Figured holotype USNM 84857 marked Nashville [Davidson Co., Tennessee].
- perlatus Lea, Unio: 1863, PANSP 15: 193 (Cape Fear River, Black Rock Landing [2 mi S Kings Bluff, Bladen Co.], North Carolina); 1866, JANSP (2) 6: 15, pl. 4, fig. 13; 1867, Obs. 11: 19. Figured holotype USNM 86006.
- perlucens Lea, Unio: 1863, PANSP 15: 193 (Six Runs, Sampson Co., North Carolina); 1866, JANSP (2) 6: 18, pl. 5, fig. 16; 1867, Obs. 11: 22. Figured holotype USNM 85076.
- permiscens Lea, Unio: 1859, PANSP 11: 112 (Tombigbee River, Columbus, [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 102, pl. 17, fig. 251; 1862, Obs. 8: 106. Figured holotype USNM 86118.
- pernodosus Lea, Unio: 1845, PAPS 4: 163 (North Carolina); 1848, TAPS 10: 71, pl. 3, fig. 8, 1848; Obs. 4: 45. Figured holotype USNM 84298.



perpastus Lea, Unio: 1861, PANSP 13: 60 (Coosa River, Alabama);  
1861, JANSP (2) 5: 69, pl. 7, fig. 219; 1862, Obs. 8: 73.  
Known only from the figured holotype USNM 84960.

perpictus Lea, Unio: 1860, PANSP 12: 306 (Bull River;  
Holston River; both Tennessee); 1860, JANSP (2) 4: 350,  
pl. 58, fig. 175; 1860, Obs. 8: 32. Figured holotype  
USNM 85034 from the former locality.

perplexus Lea, Unio: 1831: TAPS 4: 112, pl. 17, fig. 42  
(Ohio); 1834, Obs. 1: 122. Figured holotype USNM 84324.

perpurpureus Lea, Unio: 1861, PANSP 13: 41 (Tennessee); 1866,  
JANSP (2) 6: 46, pl. 16, fig. 44; 1867, Obs. 11: 50.  
Figured holotype USNM 85246.

perradiatus Lea, Unio: 1858, PANSP 10: 40 ([Tennessee River],  
Florence, [Lauderdale Co.], Alabama); 1861, JANSP (2) 5:  
66, pl. 6, fig. 215; 1862, Obs. 8: 70. Known only from  
the figured holotype USNM 84501.

perstriatus Lea, Unio: 1852, TAPS 10: 255, pl. 12, fig. 3  
(Abbeville District, [Savannah River drainage], South  
Carolina); 1852, Obs. 5: 11. Figured holotype USNM 85892.

persulcatus Lea, Unio: 1859, PANSP 11: 153 (Mexico; Hanley);  
1860, JANSP (2) 4: 25, pl. 40, fig. 135; 1860, Obs. 7: 73.  
Known only from the figured holotype BMNH 1900.3.19.22.

- pertenuis Lea, Unio: 1863, PANSP 15: 193 (Neuse River, near [6 mi. E] Raleigh, [Wake Co.], North Carolina; 1866, JANSP (2) 6: 8, pl. 2, fig. 4; 1861, Obs. 11: 12. Figured holotype USNM 86139.
- phaselus Lea, Unio: 1856, PANSP 8: 94 (Siam); 1857, JANSP (2) 3: 297, pl. 26, fig. 11; 1857, Obs. 6: 17. Figured holotype USNM 84143.
- piceus Lea, Unio: 1860, PANSP 12: 91 (Uruguay River [Argentina and Uruguay]); 1863, JANSP (2) 5: 397, pl. 41, fig. 287; 1863, Obs. 10: 15. Figured holotype USNM 85243.
- pictus Lea, Unio: 1834, TAPS 5: 73, pl. 11, fig. 32 (Harpeth River, Tennessee; Troost); 1834, Obs. 1: 185. Figured type in Troost colln., Rijksmuseum, Leiden, Holland [not found in 1961]; syntype ANSP 126139 from Troost in the Wheatley colln.
- piger Lea, Unio: 1860, PANSP 12: 90 (Uruguay River [Argentina and Uruguay]); 1863, JANSP (2) 5: 287; pl. 45, fig. 296 1863, Obs. 10: 23. Known only from the figured holotype USNM 85164.
- pilaris Lea, Unio: 1840, PAPS 1: 285 (French Broad and Holston Rivers, East Tennessee); 1842, TAPS 8: 209, pl. 14, fig. 24, 1842, Obs. 3: 47. Figured holotype USNM 85817 from the former locality.

pilatus Lea, Unio: 1866, PANSP 18: 133 (Siam); 1868, JANSP (2) 6: 281, pl. 38, fig. 95; 1869, Obs. 12: 41. Known only from the figured holotype USNM 85195.

pileus Lea, Unio: 1831, TAPS 4: 119, pl. 18, fig. 47 (Ohio River, near Cincinnati [Hamilton Co., Ohio]); 1834, Obs. 1: 129. Figured holotype USNM 84602a.

punguis Lea, Unio: 1857, PANSP 9: 84 (St. Peters River, upper Mississippi [River system]); 1858, JANSP (2) 4: 78, pl. 15, fig. 58; 1858, Obs. 6: 78. Known only from the figured holotype USNM 85008.

placitus Lea, Unio: 1852, TAPS 10: 279, pl. 23, fig. 38 (Alabama); 1852, Obs. 5: 35. Known only from the figured holotype USNM 85152.

Plagiodon Lea, Subgenus: 1856, PANSP 8: 79. Type species, Plagiodon isocardiodes Lea, by monotypy. 1857, JANSP (2) 3: 317; 1857, Obs. 6: 37.

plana Lea, Anodonta: 1834, TAPS 5: 48, pl. 7, fig. 18 (Bear Grass Creek, near Louisville, [Jefferson Co.], Kentucky); 1834, Obs. 1: 160. Figured holotype USNM 86626.

plancus Lea, Unio: 1860, PANSP 12: 370 (Coosa River, Wetumpka [Elmore Co.], Alabama); 1861, JANSP (2) 5: 81, pl. 10, fig. 229. Figured holotype USNM 85345.

- planicostatus Lea, Unio: 1860, PANSP 12: 92 ([Tennessee River], Tuscumbia, [Colbert Co.], Alabama); 1860, JANSPP (2) 4: 354, pl. 59, fig. 179; 1860, Obs. 8: 36. Figured holotype USNM 84975.
- planior Lea, Unio: 1868, PANSP 20: 145 (Tennessee; headwaters of the Holston River, Washington Co., Virginia); 1868, JANSPP (2) 6: 316, pl. 50, fig. 129; 1869, Obs. 12: 76. Figured holotype USNM 84391 from the former locality.
- planulata Lea, Monodondylaea: 1859, PANSP 11: 187 (Java); 1860, JANSPP (2) 4: 262, pl. 42, fig. 142; 1860, Obs. 7: 80. Known only from the figured holotype USNM 86351.
- plantii Lea, Unio: 1857, PANSP 9: 171 (Flint River, near Macon [County] Georgia); 1859, JANSPP (2) 4: 192, pl. 21, fig. 76; 1859, Obs. 7: 10. Known only from the figured holotype USNM 85005.
- planulatus Lea, Unio: 1829, TAPS 3: 431, pl. 9, fig. 13 (Ohio); 1834, Obs. 1: 45. Figured holotype USNM 86059.
- plenus Lea, Unio: 1840, PAPS 1: 286 (Ohio River, near Cincinnati [Hamilton Co.], Ohio); 1842, TAPS 8: 211, pl. 14, Fig. 26; 1842, Obs. 3: 49. Figured holotype USNM 84677.
- plicatulus Lea, Unio: 1859, PANSP 11: 152 (Borneo; Cuming); 1860, JANSPP (2) 4: 247, pl. 37, fig. 126; 1860, Obs. 7: 65. Known only from the figured holotype BMNH 1965156.

pliciferus Lea, Unio: 1838, TAPS 6: 61, pl. 17, fig. 53 (Mexico; Burroughs); 1838, Obs. 2: 61. Figured type not in the USNM or ANSP; syntype USNM 84080.

poeyanus Lea, Unio: 1857 (Rio de las Balsas, near Coyucan, [Guerrera State], Mexico); 1857, JANSF (2) 3: 315, pl. 32, fig. 30; 1857, Obs. 6: 35. Figured holotype USNM 85894.

polymorpha 'Kluster' Lea, Anodonta: 1870, Synopsis Unionidae, 4th edit., p. 84 [nomen nudum].

popeii Lea, Unio: 1857, PANSF 9: 102 (Devils River, [Valverde Co.], Texas; Rio Salado New [Nuevo] Leon [State]. Mexico); 1860, JANSF (2) 4: 372, pl. 66, fig. 197; 1860, Obs. 8: 54. Figured holotype USNM 85895 from the latter locality.

porphyreus Lea, Unio: 1861, PANSF 13: 60 (Coosa River, Alabama); 1861; JANSF (2) 5: 80, pl. 10, fig. 228; 1862, Obs. 8: 84. Known only from the figured holotype USNM 84851.

postellii Lea, Unio: 1858, PANSF 10: 165 (Randall's Creek, near Columbus [Muscogee Co.]; Carter's Creek, Baldwin Co.; both Georgia); 1859, JANSF (2) 4: 214, pl. 26, fig. 94; 1859, Obs. 7: 32. Figured holotype USNM 85470 from the latter locality.

- powellii, Lea, Unio: 1852, TAPS 10: 270, pl. 19, fig. 25  
(Saline River, Arkansas); 1852, Obs. 5: 26. Figured  
holotype USNM 85024.
- prattii Lea, Unio: 1858, PANSP 10: 166 (Chattahoochee River  
at Roswell, Cobb Co., Georgia); 1859, JANSP (2) 4: 206,  
pl. 24, figs. 88, 88a; 1859, Obs. 7: 24. Figured type  
probably USNM 85145; also male syntype in the same lot.
- pressus Lea, Unio: 1843, PAPS 2: 237. Substitute name for  
Symphynota compressa Lea 1829 when this species was placed  
in Unio, non Sowerby 1828, but compressa again became  
valid when it was placed in Lasmigona.
- prevostianus Lea, Unio: 1852, TAPS 10: 269, pl. 19, fig. 24  
(Eutowah River, Georgia; Wheatley); 1852, Obs. 5: 25.  
Known only from the figured type in the Wheatley colln.  
in the ANSP [lost].
- propinquus Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River River],  
Florence [Lauderdale Co.]; [Tennessee River], Tuscumbia  
[Colbert Co.], both Alabama); 1861, JANSP (2) 5: 63, pl.  
5, fig. 212; 1862, Obs. 8: 67. Figured holotype USNM  
84332 from the former locality.
- proprius Lea, Unio: 1865, PANSP 17: 89 ([Dry Creek] Lafayette,  
[Walker Co.], Georgia); 1868, JANSP (2) 6: 256, pl. 31,  
fig. 70; 1869, Obs. 12: 16. Figured holotype USNM 85141.

protensus Lea, Unio: 1865, PANSP 17: 33 (North Carolina;

[Eno River, near Hillsboro, Orange Co., North Carolina]);

1868, JANSP (2) 6: 256, pl. 31, fig. 71; 1869, Obs. 12:

16. Figured holotype USNM 85994.

proximus Lea, Unio: 1852, TAPS 10: 271, pl. 20, fig. 27

(Georgia); 1852, Obs. 5: 27. Known only from the figured holotype USNM 85131.

prunoides Lea, Unio: 1868, PANSP 20: 150 (South America?);

1868, JANSP (2) 6: 323, pl. 53, fig. 136; 1869, Obs. 12:

83. Known only from the figured holotype ANSP 41791.

puddicus Lea, Unio: 1860, PANSP 12: 92 (North Alabama;

[Tennessee River], Florence, [Lauderdale Co.], Alabama);

1860, JANSP (2) 4: 346, pl. 56, fig. 171; 1860, Obs. 8:

28. Figured holotype USNM 84553 from the former locality.

pulcher Lea, Unio: 1838, TAPS 6: 6, pl. 3, fig. 6 (near Nash-

ville [Davidson Co.], Tennessee; Troost). 1838, Obs. 2:

6. Figured holotype returned to Troost, not in the

Leiden Museum, Netherlands, presumed to be MCZ 5824 Harpeth

River, Tennessee, with Troost's label, "Mr. Lea has, I

think, improperly made from the varieties of this two other

species [presumably U. menkianus and interruptus]," from

the R. E. Call colln.

- pullatis Lea, Unio: 1856, PANSP 8: 262 (creeks near Columbus [Muscogee Co.], Georgia). Changed to:
- pullatus Lea Unio: 1858, JANSP (2) 4: 57, pl. 8, fig. 39; 1858, Obs. 6: 57. Figured holotype USNM 86020.
- pulvinulus Lea, Unio: 1845, PAPS 4: 164 ([Black Warrior River], Tuscaloosa [Tuscaloosa Co.]; Coosawattee River, Murray Co.; both Alabama); 1848, TAPS 10: 81, pl. 8, fig. 24; 1848, Obs. 4: 55. Figured holotype USNM 84838 from the former locality.
- pumilus Lea, Unio: 1838, TAPS 6: 23, p. 7, fig. 17 (Black River, North Carolina. Mistakenly restricted to Black Creek of the Neuse River, by Johnson, 1970, Bull. Mus. Comp. Zool. 140: 301; corrected to Black River [Cape Fear River System: South River drainage] on the road from Fayetteville to Smithfield [about 5 mi. NE Erwin and about 4 mi ESE Coats, Harnett Co.], North Carolina by Fuller, 1972, Nautilus 86: 72); 1838, Obs. 2: 23. Figured holotype USNM 84545.
- punctatus Lea, Unio: 1865, PANSP 17: 89 (Caney Fork, Tennessee; [Tennessee River] Tuscumbia [Colbert Co.], Alabama; 1868, JANSP (2) 6: 261, pl. 32, fig. 76; 1869, Obs. 12: 21. Figured holotype USNM 84968 from the former locality.



purpurellus Lea, Unio: 1857, PANSP 9: 171 (Flint River near Albany [Dougherty Co.], Georgia); 1859, JANSP (2) 4: 19, pl. 23, fig. 81; 1859, Obs. 7: 16. Figured holotype USNM 85675.

purus Lea, Unio: 1858, PANSP 10: 41 (Neuse River, 6 mi. from [East] Raleigh, Wake Co., North Carolina); 1861, JANSP (2) 5: 61, pl. 4, fig. 209; 1862, Obs. 8: 65. Figured holotype USNM 85003.

pusillus Lea, Unio: 1840, PAPS 1: 286 (Ogeechee River, Georgia); 1842, TAPS 8: 220, pl. 18, fig. 36; 1842, Obs. 3: 58. Figured holotype USNM 85241.

pustulatus Lea, Unio: 1831, TAPS 4: 79, pl. 7, fig. 9 (Ohio; T. G. Lea; Tennessee, Vanuxem); 1834, Obs. 1: 89. Type [lost]; syntype USNM 84200 from the former locality.

pustulosus Lea, Unio: 1831, TAPS 4: 76, pl. 7, fig. 7 (Ohio, T. G. Lea; Alabama River, Tait); 1834, Obs. 1: 86. Figured type [lost]; syntypes ANSP 43058 from Ohio mentioned as in the ANSP.

pybasii Lea, Unio: 1858, PANSP 10: 40 (Tennessee River, Tuscumbia [Colbert Co.], Alabama); 1861, JANSP (2) 5: 67, pl. 6, fig. 216; 1862, Obs. 8: 71. Figured holotype USNM 85138.

- pygmaeus Lea, Unio: 1852, TAPS 10: 262, pl. 15, fig. 14  
(Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 18. Known only from the figured holotype USNM 85240, which consists of a single right valve.
- pyramidatus Lea, Unio: 1831, TAPS 4: 109, pl. 16, fig. 39  
(Ohio); 1834, Obs. 1: 119. Figured holotype not in the USNM; syntypes ANSP 41726 mentioned as in the ANSP.
- pyriformis Lea, Unio: 1857, PANSP 9: 31 (near Columbus [Muscogee Co.], Georgia); 1858, JANSP (2) 4: 69, pl. 12, fig. 50; 1858, Obs. 6: 69. Figured holotype USNM 84781.
- quadrans Lea, Unio: 1860, PANSP 12: 306 (Texas, Wheatley; South America, teste Simpson); 1860, JANSP (2) 4: 360, pl. 61, fig. 185; 1860, Obs. 8: 42. Known only from the figured holotype ANSP 125601.
- quadrata Lea, Margaritana: 1861, PANSP 13: 41 (East Tennessee); 1862, JANSP (2) 5: 210, pl. 32, fig. 279; 1863, Obs. 9: 32. Figured holotype USNM 86264.
- quadratus Lea, Unio: 1859, PANSP 11: 172 (Carter's Creek; [Baldwin Co.]; Factory Creek near Columbus [Muscogee Co.]; both Georgia); 1860, JANSP (2) 4: 338, pl. 54, fig. 163; 1860, Obs. 8: 20. Figured holotype USNM 85718 from the latter locality.

quadrilaterus Lea, Unio: 1863, PANSP 15: 192 (Abbeville District [Savannah River drainage], South Carolina. Neuse River, near Raleigh [Wake Co.]; Catawba River; both North Carolina); 1866, JANSP (2) 5: 6, pl. 1, fig. 1; 1867, Obs. 11: 9. Figured holotype USNM 85385 from the second locality.

radians Lea, Unio: 1857, PANSP 9: 32 (Oothcalooga [Oothkalooga] Creek, Gordon Co., Georgia); 1859, JANSP (2) 4: 201, pl. 23, fig. 84; 1859, Obs. 7: 19. Figured holotype USNM 85156.

radiolus Lea, Unio: 1871, PANSP 23: 192 (Ogeechee River, Liberty Co., Georgia); 1874, JANSP (2) 8: 21, pl. 6, fig. 18; Obs. 13: 25. Figured holotype USNM 85621.

radius Lea, Unio: 1871, PANSP 23: 192 (Holston River, East Tennessee); 1874, JANSP (2) 8: 13, pl. 3, fig. 9; 1874, Obs. 13: 17. Figured holotype USNM 84647.

raditoides Lea, Unio: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry 1896, PANSP 48: 567-570). Measured type ANSP 31519. Specimens figured by Whitfield, 1885, Brach. and Lamell. Rar tan Clays and Greensand Marls of N. J., p. 245, pl. 34, figs. 1-3. Is Lampsilis radiata (Gmelin).

raeensis Lea, Unio: 1859, PANSP 11: 171 (Chattahoochee River, near Columbus [Muscogee Co.]; Rae's Creek [not located]; both Georgia); 1860, JANSP (2) 4: 331, pl. 52, fig. 156 1860, Obs. 8: 13. Figured holotype USNM 85571, from the latter locality.

rajahensis Lea, Unio: 1841, PAPS 2: 30 (The Rajah's Tank, Calcutta, [India]); 1842, TAPS 8: 239, pl. 23, fig. 53; 1842, Obs. 3: 77. Figured holotype USNM 84638.

raleighensis Lea, Unio: 1863, PANSP 15: 191 (Neuse River, 6 mi E Raleigh [Wake Co.], North Carolina); 1866, JANSP (2) 6: 6, pl. 1, fig. 2; 1867, Obs. 11: 10. Figured holotype USNM 85592.

rangianus Lea, Unio: 1838, TAPS 6: 95, pl. 18, fig. 56 (Ohio River, near Cincinnati [Hamilton Co.]; [Mahoning River] near Poland, [Mahoning Co.]; both Ohio); 1838, Obs. 2: 95. Figured holotype USNM 84798 from the latter locality.

rasus Lea, Unio: 1863, PANSP 15: 189 (Assyria); 1866, JANSP (2) 6: 50, pl. 17, fig. 47; 1867, Obs. 11: 54. Known only from the figured holotype USNM 85231.

ratus Lea, Unio: 1872, PANSP 24: 160 (Neuse River, North Carolina) 1874, JANSP (2) 8: 52, pl. 18, fig. 51; 1874, Obs. 13: 56. Known only from the figured holotype USNM 85382.

- raveneliana Lea, Margaritana: 1834, TAPS 5: 106, pl. 17, fig. 50 (French Broad and Swananoë [Swannanoa] Rivers; both North Carolina); 1834, Obs. 1: 218. Figured type in Lea or Ravenell coll'ns. Not in USNM; not in Charleston, South Carolina Mus. Nat. Hist. (teste, A. E. Saunders, pers. com.).
- ravenelianus Lea, Unio: 1834, TAPS 5: 32, pl. 3, fig. 5 (French Broad River, tributary to the Tennessee, near Asheville [Buncombe Co.], North Carolina); 1834, Obs. 1: 144. Figured holotype USNM 84783.
- recurvatus Lea, Unio: 1871, PANSP 23: 192 (Tennessee River; Holston River, East Tennessee); 1874, JANSP (2) 8: 10, pl. 2, fig. 6; 1874, Obs. 13: 14. Figured holotype USNM 8580 from the latter locality.
- recurvirostra 'Kluster' Lea, Anodonta: 1870, Synopsis Unionidae, 4th edit., p. 34 [nomen nudum].
- reeveianus Lea, Unio: 1852, TAPS 16: 272, pl. 20, fig. 28 ([Red River] Alexandria [Rapides Parish], Louisiana); 1852, Obs. 5: 28. Figured holotype USNM 85025; allotype MCZ 178918 from Arkansas "Lea so decided from this specimen and another," Powell (teste Lea).
- refulgens Lea, Unio: 1868, PANSP 20: 145 (Oktibbeha River [Enterprise], Leflore Co., Mississippi); 1868, JANSP (2) 6: 317, pl. 51, fig. 130; 1869, Obs. 12: 77. Figured holotype USNM 84290.

- regularis Lea, Unio: 1841, PAPS 2: 82 (French Broad River, East Tennessee); 1842, TAPS 8: 243, pl. 25, fig. 59; 1842, Obs. 3: 81. Figured holotype USNM 85067.
- rhomboidea Lea, Monocondylaea: 1859, PANSP 11: 187 (Euphrates River, near Bagdad [Iraq]); 1860, JANSP (2) 4: 263, pl. 42, fig. 143; 1860, Obs. 7: 81. Figured holotype USNM 86329 consists of two almost matching valves.
- riddellii Lea, Unio: 1861, PANSP 13: 392 ([Trinity River], Dallas, [Dallas Co.], Texas); 1862, JANSP (2) 5: 198, pl. 27, fig. 267; 1863, Obs. 9: 20. Figured holotype USNM 84635.
- roanokensis Lea, Unio: 1838, TAPS 6: 27, pl. 8, fig. 21 (Roanoke River between Norfork and Tarborough, North Carolina; Altamaha River, Georgia). 1838, Obs. 2: 27. Figured holotype USNM 85423 from the former locality.
- roanokoides Lea, Unio: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured type ANSP 31520. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J., p. 248, pl. 33, figs. 1-2, pl. 34, fig. 7. Is Elliptio complanata (Lightfoot

rostellum Lea, Unio: 1872, PANSP 24: 160 (Macon [Bibb Co.], Georgia); 1874, JANSP (2) 8: 44, pl. 15, fig. 41; 1874, Obs. 13: 48. Figured holotype USNM 85972.

rostraeformis Lea, Unio: 1856, PANSP 8: 262 (Swift Creek, near Macon [Bibb Co.], Georgia). Changed to:

rostriformis Lea, Unio: 1858, JANSP (2) 4: 64, pl. 10, fig. 46; 1858, Obs. 6: 64. Probable figured holotype USNM 85973.

rostrum Lea, Unio: 1861, PANSP 13: 391 (Davidson Co., North Carolina); 1862, JANSP (2) 5: 201, pl. 29, fig. 270; 1863, Obs. 9: 23. Known only from the figured holotype USNM 85556.

roswellensis Lea, Unio: 1858, PANSP 10: 165 (Chattahoochee River, Roswell, Cobb Co., Georgia); 1859, JANSP (2) 4: 205, pl. 24, fig. 87; 1859, Obs. 7: 23. Figured holotype USNM 85467.

rowellii Lea, Unio: 1859, PANSP 11: 153 (Chargres River, New Grenada [Colombia]); 1860, JANSP (2) 4: 256, pl. 40, fig. 136; 1860, Obs. 7: 74. Figured holotype USNM 84398.

rubellinus Lea, Unio: 1857, PANSP 9: 32 (Othcalooga [Ooth-kalooga] Creek, Gordon Co., Georgia); 1858, JANSP (2) 4: 70, pl. 13, fig. 51; 1858, Obs. 6: 70. Figured holotype USNM 84136.

- rubicunda Lea, Anodonta: 1860, PANSP 12: 92 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 392, pl. 46, fig. 299; 1863, Obs. 10: 28. Figured holotype USNM 86401.
- rubidus Lea, Unio: 1861, PANSP 13: 40 (Tombigbee River [Columbus, Lauderdale Co.], Mississippi; Coosa River and Big Prairie Creek [Hale Co.], both Alabama); 1861, JANSP (2) 5: 95, pl. 14, fig. 244; 1862, Obs. 8: 99. Figured holotype USNM 84381 from the first locality.
- rubiginosus Lea, Unio: 1829, TAPS 3: 427, pl. 8, fig. 10 (Ohio); 1834, Obs. 1: 41. Figured holotype USNM 84556.
- rudus Lea, Unio: 1859, PANSP 11: 187 (Rio de la Plata [Argentina]); 1860, JANSP (2) 4: 266, pl. 43, fig. 146; 1860, Obs. 7: 84. Known only from the figured holotype USNM 85337.
- rufofuscus Lea, Unio: 1865, PANSP 17: 76 (Hab.? [South America]); 1868, JANSP (2) 6: 282, pl. 39, fig. 96; 1869, Obs. 12: 42. Known only from the figured holotype USNM 84101.
- rufus Lea, Unio: 1857, PANSP 9: 171 (Etowah River, Cass Co., Georgia); 1858, JANSP (2) 4: 85, pl. 17, fig. 65; 1858, Obs. 6: 85. Figured holotype USNM 86070.
- rufusculus Lea, Unio: 1852, TAPS 10: 258, pl. 14, fig. 7 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 14. Figured holotype USNM 85683.



- rugososulcatus Lea, Unio: 1866, PANSP 18: 33 (Central America);  
1868, JANSP (2) 6: 266, pl. 34, fig. 81; 1869, Obs. 12: 26.  
Figured holotype USNM 84392.
- rumphianus Lea, Unio: 1852, TAPS 10: 276, pl. 22, fig. 34  
(West Georgia); 1852, Obs. 5: 32. Known only from the  
figured holotype USNM 84189, which consists of a single  
valve.
- rusticus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2)  
3: 294, pl. 25, fig. 7; 1857, Obs. 6: 14. Figured holotype  
USNM 84082.
- rutersvillensis Lea, Unio: 1859, PANSP 11: 155 ([Colorado  
River], Rutersville, Fayette Co., Texas); 1860; JANSP  
(2) 4: 356, pl. 60, fig. 181; 1860, Obs. 8: 38. Figured  
holotype USNM 85976.
- rutilans Lea, Unio: 1857, PANSP 8: 262 (Oothcalooga [Oothkalooga]  
Creek, Gordon Co.; Columbus [Muscogee Co.]; both Georgia);  
1858, JANSP (2) 4: 59, pl. 9, fig. 41; 1858, Obs. 6: 59.  
Figured holotype USNM 85093 from the former locality.
- sagittarius Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP  
(2) 3: 298, pl. 26, fig. 12; 1857, Obs. 6: 18. Figured  
holotype USNM 85934.
- sagittiformis Lea, Unio: 1852, TAPS 10: 277, pl. 22, fig. 35  
(Oconee River, near Athens [Clarke Co.], Georgia); 1852,  
Obs. 5: 33. Figured holotype USNM 85970.

saladoensis Lea, Unio: 1860, PANSP 12: 305 (Rio Salado, New [Nuevo] Leon [State], Mexico); 1860, JANSP (2) 4: 370, pl. 65, fig. 195; 1860, Obs. 8: 52. Known only from the figured type in the USNM [lost].

salebrosus Lea, Unio: 1859, PANSP 11: 170 (Flat Rock Creek; Bull Creek; Chattahoochee River; all near Columbus [Muscogee Co.], Georgia); 1860, JANSP (2) 4: 332, pl. 52, fig. 157; 1860, Obs. 8: 14. Figured holotype USNM 85574 from the first locality.

salmonia Lea, Anodonta: 1838, TAPS 6: 45, pl. 14, fig. 41 (near Poland [Mahoning Co.], Ohio); 1838, Obs. 2: 45. Figured holotype USNM 86540.

sampsonii Lea, Unio: 1861, PANSP 13: 392 (Wabash River, New Harmony, [Posey Co.], Indiana); 1862, JANSP (2) 5: 192, pl. 25, fig. 261; 1863, Obs. 2: 14. Figured holotype USNM 84802.

santoensis Lea, Unio: 1871, PANSP 23: 193 (Santee Canal, South Carolina; Oconee River, Georgia); 1874, JANSP (2) 8: 20, pl. 6, fig. 17; 1874, Obs. 13: 24. Figured holotype USNM 85635 from the former locality.

sapotalensis Lea, Unio: 1841, PAPS 2: 30 (Sapotal River, near Tlocatalpan [Tlacatalpan, Vera Cruz State], Mexico; Burrough); 1842, TAPS 8: 233, pl. 21, fig. 47; 1842, Obs. 3: 71. Known only from the figured holotype USNM 84072, mentioned as in the Burrough colln., not returned to the ANSP.

satillaensis Lea, Unio: 1858, PANSP 10: 166 (Satilla River, Camden Co., Georgia); 1859, JANSP (2) 4: 216, pl. 27, fig. 96; 1859, Obs. 7: 34. Figured holotype USNM 84855.

satur Lea, Unio: 1852, TAPS 10: 205, pl. 17, fig. 19.  
([Red River] Alexandria [Rapides Parish] Louisiana;  
Lake Calcashue near New Orleans; Louisiana; Anthony)  
1852, Obs. 5: 21. Figured holotype USNM 84505 from the former locality; paratype MCZ 53862 from the supposed later locality corrected to: Amite River, Louisiana by Anthony, with his label, "Mr. Lea drew up his description of the species partly from my specimen!"

savannanensis Lea, Unio: 1857, PANSP 9: 169 (Savannah River; Brantley's Mill, Washington Co.; both Georgia; Santee Canal, South Carolina; Sugar Creek, Mecklenburg Co., North Carolina)  
1859, JANSP (2) 4: 80, pl. 16, fig. 61; 1858, Obs. 6: 81.  
Figured holotype USNM 85404 from Savannah River.

- schoolcraftensis Lea, Unio: 1834, TAPS 5: 37, pl. 3, fig. 9  
(Fox River at Green Bay, [Brown Co., Wisconsin]; 1834,  
Obs. 1: 149. Figured type in the ANSP [lost].
- schroteriana Lea, Anodonta: 1852, TAPS 11: 292, pl. 29, fig.  
55 (Rio Negro, Brazil); 1852, Obs. 5: 48. Known only from  
the holotype USNM 86727 which consists of two odd valves.
- scitulus Lea, Unio: 1860, PANSP 12: 93 ([Tennessee River],  
Tuscumbia [Colbert Co.], Alabama); 1860, JANSF (2) 4:  
342, pl. 55, fig. 167; 1860, Obs. 8: 24. Figured  
holotype USNM 85084.
- scobinatus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSF  
(2) 3: 299, pl. 26, fig. 13; 1857, Obs. 6: 19. Figured  
holotype USNM 84145
- securis Lea, Unio: 1829, TAPS 3: 437, pl. 11, fig. 17 (Ohio);  
1834, Obs. 1: 51. Figured holotype USNM 84475.
- senegalensis Lea, Anodonta: 1859, PANSP 11: 154 (Senegal);  
1860, JANSF (2) 4: 260, pl. 41, fig. 140; 1860, Obs. 7:  
78. Figured holotype BMNH 1965167.
- shaefferiana Lea, Anodonta: 1852, TAPS 10: 288, pl. 26, fig.  
50 (Horn Lake Creek, [Shelby Co.], Tennessee); 1852,  
Obs. 5: 44. Figured holotype USNM 86685.

- shanghaiensis Lea, Unio: 1859, PANSP 11: 153 (Shanghai, China; Cuming); 1860, JANSP (2) 4: 242, pl. 36, fig. 121; 1860, Obs. 7: 60. Figured holotype BMNH 1965171.
- shepardianus Lea, Unio: 1834, TAPS 5: 95, pl. 13, fig. 38 ([Altamaha River] Hopeton, near Darien [McIntosh Co.] Georgia; Shepard) 1834, Obs. 1: 207. Figured type returned to Dr. Shepard [lost]; three presumed syntypes MCZ 155568, from Shepard.
- showalterii Lea, Anodonta: 1860, PANSP 12: 307 (Coosa River, Wetumpka [Elmore Co.], Alabama); 1862, JANSP (2) 5: 215, pl. 33, fig. 284; 1863, Obs. 9: 37. Figured holotype USNM 86487.
- showalterii Lea, Unio: 1860, PANSP 12: 307 (Coosa River, Wetumpka [Elmore Co.], Alabama); 1861, JANSP (2) 5: 73, pl. 8, fig. 223; 1862, Obs. 8: 77. Figured holotype USNM 85748.
- shurtleffianus Lea, Unio: 1856, PANSP 8: 94 (Sina River, India, Le Conte; Ahmednugger, India, Shurtleff); 1857, JANSP (2) 3: 302, pl. 27, fig. 17; 1857, Obs. 6: 22. Figured type not in the USNM [lost]; syntype MCZ 175566 from Shurtleff.

shuttleworthii Lea, Unio: 1856, PANSP 8: 94 (Australia); 1857, JANSP (2) 3: 304, pl. 28, fig. 19; 1857, Obs. 6: 24. Figured holotype USNM 84416 refigured by McMichael and Hiscock, 1958, Australian Jour. Marine and F. W. Res. 9: 415, pl. 6, figs. 1, 2 and the type locality restricted to South Queensland. Non Klüster 1855, changed to Alathyra pertexa Iredale, 1934, Australian Zool. 8: 64, pl. 3, fig. 10; pl. 4, fig. 10.

siamensis Lea, Unio: 1866, PANSP 18: 133 (Siam); 1868, JANSP (2) 6: 279, pl. 38, fig. 93; 1869, Obs. 12: 39. Figured holotype USNM 85893.

sikkimensis Lea, Unio: 1859, PANSP 11: 151 (Sikkim, India; Cuming); 1860, JANSP (2) 4: 251, pl. 39, fig. 131; 1860, Obs. 7: 69. Figured holotype BMNH 1965177.

similis Lea, Unio: 1857, PANSP 9: 169 (Buckhead Creek, Burke Co., Georgia); 1858, JANSP (2) 4: 91, pl. 19, fig. 71; 1858, Obs. 6: 91. Figured holotype USNM 85653.

simplex Lea, Unio: 1845, PAPS 4: 163 (Black Warrior River, Alabama); 1848, TAPS 10: 76, pl. 5, fig. 15; 1848, Obs. 4: 50. Figured holotype USNM 84951.

simpsoniana Lea, Anodonta: 1861, PANSP 13: 56 (Fort Rae, Great Slave Lake [District of Mackenzie, Canada]; 1862, JANSP (2) 5: 212, pl. 32, fig. 281; 1863, Obs. 9: 34. Known only from the figured holotype USNM 86434.

- simulans Lea, Unio: 1871, PANSP 23: 190 (Cahawba River, Shelby Co., Alabama); 1874, JANSP (2) 8: 18, pl. 5, fig. 15; 1874, Obs. 13: 22. Figured holotype USNM 84840.
- simus Lea, Unio: 1838, TAPS 6: 26, pl. 8, fig. 20 (Cumberland River, Tennessee); 1838, Obs. 2: 26. Figured holotype USNM 85342.
- sloatianus Lea, Unio: 1840, PAPS 1: 287, (Chattahoochee River, Georgia, restricted to Columbus [Muscogee Co.], by Clench and Turner 1956, Bull. Fla. State Mus. 1: 173); 1842, TAPS 8: 217, pl. 16, fig. 33; 1842, Obs. 3: 55. Figured holotype returned to Jay, AMNH 56104.
- soleniformis Lea, Unio: 1831, TAPS 4: 87, pl. 10, fig. 17 (Ohio; T. G. Lea); 1834, Obs. 1: 97. Type [lost].
- solidus Lea, Unio: 1838, TAPS 6: 13, pl. 5, fig. 13 (Ohio River, Cincinnati [Hamilton Co.], T. G. Lea; Mahoning River, Kirtland; both Ohio); 1838, Obs. 2: 13. Type [lost].
- sordidis Lea, Unio: 1852, TAPS 10: 254, pl. 12, fig. 1 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 10. Figured holotype USNM 85688.
- sowerbianus Lea, Unio: 1834, TAPS 5: 68, pl. 10, fig. 28 (Tennessee; G. B. Sowerby); 1834, Obs. 1: 180, type [lost]; 4 specimens subsequently identified by Lea MCZ 178886 from Caney Fork of the Cumberland River, Tennessee.

spadiceus Lea, Unio: 1857, PANSP 9: 86 (Deep River, Gulf [Chatham Co.]; mountain streams; both North Carolina); 1861, JANSP (2) 5: 55, pl. 1, fig. 201; 1862, Obs. 8: 59. Figured holotype USNM 85251 from the latter locality.

sparsus Lea, Unio: 1841, PAPS 2: 82 (Holston River, East Tennessee); 1842, TAPS 8: 242, pl. 25, fig. 58, 1842, Obs. 3: 80. Figured holotype USNM 84222

sparus Lea, Unio: 1868, PANSP 20: 143 (Swamp Creek, Whitfield Co., Georgia); 1869, JANSP (2) 6: 306, pl. 47, fig. 119; 1869, Obs. 12: 66. Figured holotype USNM 85082.

spatulatus Lea, Unio: 1845, PAPS 4: 164 (Rock River [mostly Dodge Co.], Wisconsin); 1848, TAPS 10: 80, pl. 8, fig. 22; 1848, Obs. 4: 54. Figured holotype USNM 84982.

speciosus Lea, Unio: 1862, PANSP 14: 168 (Colorado River, near Lagrange, [Fayette Co.]; Leon Co.; both Texas); 1862, JANSP (2) 5: 207, pl. 31, fig. 276; 1863, Obs. 9: 29. Figured holotype USNM 84172.

sphaericus Lea, Unio: 1868, PANSP 20: 145 (Pearl River, Jackson [Hinds Co.], Mississippi); 1868, JANSP (2) 6: 319, pl. 51, fig. 132; 1869, Obs. 12: 79. Figured holotype USNM 84271.



spillmanii Lea, Margaritana: 1858, PANSP 10: 138 ([Magbys Creek, not located, written in shell] of the Tombigbee River, near Columbus [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 105, pl. 17, fig. 252; 1862, Obs. 8: 109. Figured holotype USNM 86278.

spillmanii Lea, Unio: 1861, PANSP 13: 39 (Luxpalila Creek, near Columbus [Lowndes Co.], Mississippi); 1861, JANSP (2) 5: 98, pl. 15, fig. 246; 1862, Obs. 8: 102. Figured holotype USNM 84825.

spinosus Lea, Unio: 1836, Description of a new Unio, pp. 1-4 (Col. figs.); 1838, TAPS 6: 57, pl. 16, fig. 50 (Altamaha [River], Hopeton, near Darien [McIntosh Co.], Shepard; Altamaha River, Liberty [now Long] Co., LeConte; both Georgia); 1838, Obs. 2: 57. Figured type returned to Shepard [lost]; syntypes ANSP 41400 from LeConte and ANSP 129763 from Lea.

spissus Lea, Unio: 1859, PANSP 11: 112 (Satilla River, Wayne Co., Georgia); 1859, JANSP (2) 4: 208, pl. 25, fig. 89 1859, Obs. 7: 26. Figured holotype USNM 84853.

splendidus Lea, Unio: 1838, TAPS 6: 70, pl. 19, fig. 61

(Altamaha [River], near Darien [McIntosh Co.]; Altamaha River, Liberty [now Long] Co.; both Georgia); 1838, Obs. 2: 70. Figured holotype USNM 84893 from the latter locality.

squalidus Lea, Unio: 1863, PANSP 15: 192 (Neuse River, near [6 mi E] Raleigh [Wake Co.]; Roanoke River, near Weldon [Halifax Co.]; Deep River; all North Carolina); 1866, JANSP (2) 6: 22, pl. 7, fig. 20; 1867, Obs. 11: 26.

Figured holotype USNM 85376, from the second locality.

squameus Lea, Unio: 1861, PANSP 13: 391 (North Carolina); 1862, JANSP (2) 5: 200, pl. 28, fig. 269; 1863, Obs. 9: 22. Figured holotype USNM 85530.

stabilis Lea, Unio: 1861, PANSP 13: 59 (Coosa River, Alabama); 1861, JANSP (2) 5: 71, pl. 8, fig. 221; 1862, Obs. 8: 75. Figured holotype USNM 84639.

stapes Lea, Unio: 1831, TAPS 4: 77, pl. 7, fig. 8 (Alabama River); 1834, Obs. 1: 87. Figured holotype USNM 84218.

- stevensii Lea, Unio: 1871, PANSP 23: 188 (Yuruari River, tributary to Essequibo River, Guiana); 1874, JANSP (2) 8: 22, pl. 7, fig. 19; 1874, Obs. 13: 26. Figured holotype 83901.
- stewartiana Lea, Anodonta: 1834, TAPS 5: 47, pl. 6, fig. 17 (River Teche, [St. Landry Parish], Louisiana); 1834, Obs. 1: 159. Figured holotype USNM 86664.
- stewardsonii Lea, Unio: 1852, TAPS 10: 278, pl. 23, fig. 36 (Chatanooga River, Tennessee); 1852, Obs. 5: 34. Known only from the figured holotype ANSP 56572; 2 subsequently identified specimens USNM 84605.
- stonensis Lea, Unio: 1840, PAPS 1: 286 (Stones River, Tennessee); 1842, TAPS 8: 195, pl. 8, fig. 5; 1842, Obs. 3: 33. Figured holotype USNM 84969, probably Roanoke River, Virginia; teste Simpson.
- strebelii Lea, Anodonta: 1868, PANSP 20: 150 [Rio Medellin] Vera Cruz [Vera Cruz State] Mexico); 1868, JANSP (2) 6: 322, pl. 52, fig. 135; 1869, Obs. 12: 82. Known only from the figured holotype USNM 25433.

- strebelii Lea, Unio: 1866, PANSP 18: 133 ([Rio Medellin]  
Vera Cruz, [Vera Cruz State], Mexico); 1868, JANSP (2)  
6: 318, pl. 51, fig. 131; 1869, Obs. 12: 73. Figured  
holotype USNM 85661.
- striatulus Lea, Unio: 1857, PANSP 9: 86 (Roanoke River, Weldon  
[Halifax Co.], North Carolina; 1861, JANSP (2) 5: 55,  
pl. 2, fig. 202; 1862, Obs. 8: 59. Figured holotype  
USNM 84548.
- striatus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River,  
Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 203,  
pl. 12, fig. 16; 1842, Obs. 3: 41. Figured holotype  
USNM 84797.
- strigosus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River,  
Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 198,  
pl. 9, fig. 9; 1842, Obs. 3: 36. Figured holotype USNM  
85890.
- strumosus Lea, Unio: 1872, PANSP 24: 158 (Yadkin River, North  
Carolina); 1874, JANSP (2) 8: 57, pl. 19, fig. 55; 1874,  
Obs. 13: 61. Figured holotype USNM 85755.
- suavidicus Lea, Unio: 1856, PANSP 8: 95 (Amazon River [Brazil]);  
1857, JANSP (2) 3: 309, pl. 29, fig. 24; 1857, Obs. 6:  
29. Known only from the figured holotype USNM 85727.

subangulatus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 209, pl. 13, fig. 23; 1842, Obs. 3: 47. Lectotype USNM 85081 selected by Clench and Turner, 1956, Bull. Florida State Mus. 1: 197.

subcrassa Lea, Anodonta: 1850, Proc. Zool. Soc. London, p. 198 (Laguna de Bai, Luzon, Philippine Islands); 1860, JANSF (2) 4: 236, pl. 33, fig. 115; 1860, Obs. 7: 54. Figured holotype USNM 86693.

subcylindracea Lea, Anodonta: 1838, TAPS 6: 106, pl. 24, fig. 117 (Oak Orchard Creek, Orleans Co., New York); 1838, Obs. 2: 106. Figured type lost. Mentioned as in the Lea and Jay collns., but not found in the USNM or AMNH. Specimen identified by Lea ANSP 126680.

subcylindraceus Lea, Unio: 1874, PANSP for 1873, 25: 422 (Rocky Creek, near Macon [Bibb Co.]; Carter's Creek, [Baldwin Co.]; both Georgia); 1884, JANSF (2) 8: 58, pl. 20, fig. 57; 1874, Obs. 13: 62. Figured holotype USNM 85863 from the former locality.

subellipsis Lea, Unio: 1856, PANSP 8: 262 (creeks near Columbus [Muscogee Co.], Georgia); 1858, JANSF (2) 4: 62, pl. 10, fig. 44; 1858, Obs. 6: 62. Figured holotype USNM 85095.

- subflavus Lea, Unio: 1857, PANSP 9: 170 (Walnut Creek, above Macon [Bibb Co.], Georgia); 1858, JANSP (2) 4: 90, pl. 19, fig. 70; 1858, Obs. 6: 90. Figured holotype USNM 85562.
- subgibbosus Lea, Unio: 1857, PANSP 9: 169 (Ostanaula River, Floyd Co.; Etowah River; both Georgia. Red River, Arkansas); 1858, JANSP (2) 4: 53, pl. 6, fig. 36; 1858, Obs. 6: 53. Figured holotype USNM 86101 from the first locality.
- subglobatus Lea, Unio: 1871, PANSP 23: 191 ([Tennessee River] Florence [Lauderdale Co.], Alabama); 1874, JANSP (2) 8: 7, pl. 1, fig. 3; 1874, Obs. 13: 11. Figured holotype USNM 85823.
- subglobosus Lea, Unio: 1834, TAPS 5: 30, pl. 2, fig. 3 (Bayou Teche, [St. Landry Parish] Louisiana); 1834, Obs. 1: 142. Figured holotype USNM 159969.
- sublatus Lea, Unio: 1857, PANSP 9: 169 ([Chattahoochee River] Uchee Bar, below Columbus [Muscogee Co.], Georgia); 1858, JANSP (2) 4: 82, pl. 16, fig. 62. 1858, Obs. 6: 82. Figured holotype USNM 85897.
- subniger Lea, Unio: PANSP 9: 172 (Flint River, near Macon [County], Georgia); 1859, JANSP (2) 4: 196, p. 22, fig. 79; 1859, Obs. 7: 14. Figured holotype USNM 85560.

- subolivaceus Lea, Unio: 1874, PANSP for 1873, 25: 422 (Catawba, Fox [not located] and Yadkin Rivers; all North Carolina); 1874, JANSP (2) 8: 57, pl. 20, fig. 56; 1874, Obs. 13: 61. Figured holotype USNM 85564, from the Fox River.
- subovatus Lea, Unio: 1831, TAPS 4: 118, pl. 18, fig. 46 (Ohio River); 1834, Obs. 1: 128. Figured holotype USNM 84509.
- subparallelus Lea, Unio: 1872, PANSP 24: 158 (Irwins Creek [Mecklenburg Co.] and Fox River [not located]; both North Carolina); 1874, JANSP (2) 8: 46, pl. 16, fig. 44; 1874, Obs. 13: 50. Figured holotype USNM 85418.
- subrotundoides Lea, Unio: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570. Measured holotype ANSP 31524, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J., p. 246, pl. 32, fig. 5. Is Quadrula subrotunda (Lea).
- subrotundus Lea, Unio: 1831, TAPS 4: 117, pl. 18, fig. 45 (Ohio); 1834, Obs. 1: 127. Figured holotype USNM 85832.
- subsquamosus Lea, Unio: 1872, PANSP 24: 160 (Yadkin River, North Carolina); 1874, JANSP (2) 8: 47, pl. 16, fig. 45; 1874, Obs. 13: 51. Figured holotype USNM 85557.

- substriatus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSPP (2) 3: 300, pl. 26, fig. 14; 1857, Obs. 6: 20. Known only from the figured holotype USNM 85199 which consists of, almost matching, opposed valves.
- succissus Lea, Unio: 1852, TAPS 10: 275, pl. 21, fig. 32 (West Florida; Le Conte. Type locality restricted to Choctawhatchee River, Caryville, Holmes Co., Florida, by Clench and Turner, 1956, Bull. Florida State Mus. 1: 151); 1852, Obs. 5: 31. Figured holotype USNM 84574.
- sudus Lea, Unio: 1857, PANSP 9: 170 (Dry Creek, near Columbus [Muscogee Co.]; Macon [Bibb Co.]; both Georgia); 1859, JANSPP (2) 4: 194, pl. 21, fig. 77; 1859, Obs. 7: 12. Figured holotype USNM 85155 from the former locality.
- sulcatus Lea, Unio: 1829, TAPS 3: 430, pl. 8, fig. 2 (Ohio) 1834, Obs. 1: 44. Figured holotype USNM 84803.
- sumatrensis Lea, Unio: 1859, PANSP 11: 153 (Sumatra); 1860, JANSPP (2) 4: 239, pl. 34, fig. 118; 1860, Obs. 7: 57. Non Unio sumatrensis Dunker 1852 changed by Lea to Unio dimotus 1870, Synopsis, 4th edit., p. 30. Figured holotype USNM 84059.
- superbus Lea, Unio: 1843, Desc. Twelve Uniones (New Holland [Australia]); 1846, TAPS 9: 261, pl. 42, fig. 11; 1848, Obs. 4: 39. Figured holotype USNM 83934.



- symmetricus Lea, Unio: 1845, PAPS 4: 164 ([Red River] Alexandria [Rapides Parish], Louisiana); 1848, TAPS 10: 73, pl. 4, fig. 11; 1848, Obs. 4: 47. Figured holotype USNM 85604.
- Symphynota Lea, Genus: 1829, TAPS 3: 424. Type species: Unio alata Say, original designation. 1834, Obs. 1: 38; 1829, TAPS 3: 442, 1834, Obs. 1: 56.
- syriacus Lea, Unio: 1863, PANSP 15: 189 (River Orontes, Syria); 1866, JANSP (2) 6: 56, pl. 19, fig. 53; 1867, Obs. 11: 60. Known only from the figured holotype USNM 84408.
- taitianus Lea, Unio: 1834, TAPS 5: 39, pl. 4, fig. 11 (Alabama River [Claiborne, Monroe Co., Alabama]); 1834, Obs. 1: 151. Figured holotype USNM 84653.
- tampicoensis Lea, Unio: 1838, TAPS 6: 24, pl. 7, fig. 18 (River Tampico, Mexico; River Medellin, 10 mi. S of Vera Cruz [State of Vera Cruz]; Mexico; Burrough); 1838, Obs. 2: 24. Figured holotype USNM 84843 from the former locality.
- tappanianus Lea, Unio: 1838, TAPS 6: 62, pl. 17, fig. 55 ([Frankstown Branch] Juniata River near Hollidaysburg [Blair Co.]; Schuylkill [River]; and a small stream near Lancaster [Lancaster Co.]; all Pennsylvania); 1831, Obs. 2: 62. Figured holotype USNM 86133 from the first locality.

tecomatensis Lea, Unio: 1841, PAPS 2: 30 (Tecomate River, near Tlocatalpam [Tlacatalpan, Vera Cruz State], Mexico); 1842, TAPS 8: 234, pl. 21, fig. 48; 1842, Obs. 3: 72. Figured holotype USNM 85338.

tellicoensis Lea, Unio: 1872, PANSP 24: 155 (Tellico River, Monroe Co., East Tennessee; East Tennessee); 1874, JANSP (2) 8: 31, pl. 10, fig. 28; 1874, Obs. 13: 35. Figured holotype USNM 84576.

tenebricosa Lea, Anodonta: 1834, TAPS 5: 78, pl. 12, fig. 36 (Parana River, South America); 1834, Obs. 1: 190. Figured holotype USNM 86761.

tenebricus Lea, Unio: 1857, PANSP 9: 171 (Etowah River, Georgia); 1858, JANSP (2) 4: 83, pl. 17, fig. 63; 1858, Obs. 6: 83. Figured holotype USNM 85143.

tener Lea, Unio: 1840, PAPS 1: 286 (Big Pigeon River, Tennessee); 1842, TAPS 8: 198, pl. 10, fig. 10; 1842, Obs. 3: 36. Known only from the figured holotype USNM 85026.

tennesseensis Lea, Unio: 1840, PAPS 1: 288 (Stone's River, near Nashville [Davidson Co.], Tennessee); 1842, TAPS 8: 199, pl. 10, fig. 11; 1842, Obs. 3: 37. Known only from the figured holotype USNM 84961.

- tenuis Lea, Anodonta: 1850, Proc. Zool. Soc. London, p. 198  
(Sual, Luzon, Philippine Islands; Cuming); 1860, JANSF  
(2) 4: 237, pl. 33, fig. 116; 1860, Obs. 7: 55. Figured  
type not in the BMNH [lost]; syntypes BMNH 1968654 and  
USNM 86764.
- tenuissima Lea, Symphynota: 1829, TAPS 3: 453, pl. 11, fig. 21  
(Ohio, T. G. Lea); 1834, Obs. 1: 67. Type [lost].
- tesserulae, Lea, Unio: 1861, PANSP 13: 392 (Nolachucky River,  
Tennessee); 1866, JANSF (2) 6: 40, pl. 15, fig. 39;  
1867, Obs. 11: 44. Known only from the figured holotype  
USNM 84426.
- tetragona Lea, Anodonta: 1845, PAPS 4: 165 ([Red River] Alexan-  
dria [Rapides Parish], Louisiana); 1848, TAPS 10: 82, pl. 8,  
fig. 48; 1848, Obs. 4: 56. Figured holotype USNM 86682.
- tetricus Lea, Unio: 1857, PANSP 9: 170 (Flint River, near Albany  
[Dougherty Co.], Georgia); 1859, JANSF (2) 4: 195, pl. 22,  
fig. 78; 1859, Obs. 7: 13. Figured holotype USNM 85655.
- texasensis Lea, Anodonta: 1859, PANSP 11: 113 (Texas); 1860,  
JANSF (2) 4: 366, pl. 63, fig. 191; 1860, Obs. 8: 48.  
Known only from the figured holotype USNM 86680.
- texasensis Lea, Unio: 1857, PANSP 9: 84 ([Guadalupe River]  
Dewitt Co., Texas); 1860, JANSF (2) 4: 359, pl. 61, fig.  
184; 1860, Obs. 8: 41. Figured holotype USNM 85302.

- thorntonii Lea, Unio: 1857, PANSP 9: 83 ([Tennessee River] Tuscumbia [Colbert Co.], Alabama); 1866, JANSP (2) 6: 38, pl. 14, fig. 36; 1867, Obs. 11: 42. Known only from the figured holotype USNM 85829.
- thwaitesii Lea, Unio: 1859, PANSP 11: 152 (Ceylon; Cuming); 1860, JANSP (2) 4: 264, pl. 37, fig. 125; 1860, Obs. 7: 64. Known only from the figured holotype BMNH 1965179.
- tombecbeensis Lea, Margaritana: 1858, PANSP 10: 138 (Tombigbee River, near Columbus [Lowndes Co.], Mississippi). Changed to: tombigbeensis Lea, Margaritana: 1861, JANSP (2) 5: 107, pl. 18, fig. 255; 1862, Obs. 8: 111. Figured holotype USNM 86253.
- topekaensis Lea, Unio: 1868, PANSP 20: 144 ([Kansas River] Topeka [Shawnee Co.], Kansas; Little Arkansas River; Rock Creek; Walnut Creek, Santa Fé Road [not located]; Verdigris River; all Kansas. [Nemaha River], Falls City [Richardson Co.], Nebraska); 1868, JANSP (2) 6: 313, pl. 49, fig. 126; 1869, Obs. 12: 73. Figured holotype USNM 84978 from the last locality.
- tortilis Lea, Anodonta: 1852, TAPS 10: 291, pl. 28, fig. 54 (Carthage, Colombia); 1852, Obs. 5: 47. Known only from the figured holotype USNM 86405.

- tortivus Lea, Unio: 1840, PAPS 1: 287 (Chattahoochee River, Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 204, pl. 12, fig. 17; 1842, Obs. 3: 42. Supposed figured type is USNM 85674 but it does not agree exactly with the figure and is from Lee Co., Georgia [Flint River drainage].
- tortuosus Lea, Unio: 1865, PANSP 17: 76 (China); 1868, JANSP (2) 6: 286, pl. 39, fig. 98; 1869, Obs. 12: 46. Figured holotype Buffalo [New York] Museum of Science M362J-i (1).
- trapezoides Lea, Unio: 1831, TAPS 4: 69, pl. 3, fig. 1 (Lake St. Joseph [Tensas Parish] Louisiana); 1834, Obs. 1: 79. Figured holotype USNM 84103.
- trautwiniana Lea, Anodonta: 1852, TAPS 10: 287, pl. 26, fig. 48 (Carthagen, Colombia); 1852, Obs. 5: 43. Figured holotype USNM 86684.
- triangulata Lea, Margaritana: 1858, PANSP 10: 138 (Upper Chattahoochee River; Chattahoochee River, Columbus [Muscogee Co.]; Polato Co. [sic], Potato Creek, [Upson Co.]; all Georgia. Sawney's Creek [about 8 mi NW Camden, Kershaw Co.], South Carolina); 1859, JANSP (2) 4: 228, pl. 32, fig. 111; 1859, Obs. 7: 46. Figured holotype USNM 86249 from the first locality.

- trifidus Lea, Unio: 1860, PANSP 12: 89 (Buenos Aires, Argentina); 1863, JANSP (2) 5: 386, pl. 44, fig. 295; 1863, Obs. 10: 22. Known only from the figured holotype USNM 85352.
- trigonus Lea, Unio: 1831, TAPS 4: 110, pl. 16, fig. 40 (Ohio River, Cincinnati [Hamilton Co.], Ohio; Ohio River, Louisville [Jefferson Co.], Kentucky); 1831, Obs. 1: 120. Figured holotype USNM 86429 from the former locality.
- trinacrus Lea, Unio: 1861, PANSP 13: 59 (Coosa River, Alabama); 1861, JANSP (2) 5: 86, pl. 12, fig. 235; 1862, Obs. 8: 90. Known only from the figured holotype USNM 84445.
- tripartitus Lea, Unio: 1863, PANSP 15: 190 (Jillingee River, India); 1866, JANSP (2) 6: 57, pl. 19, fig. 55; 1867, Obs. 11: 61. Figured holotype USNM 84397.
- troostensis Lea, Unio: 1834, TAPS 5: 71, pl. 10, fig. 30 (Cumberland River [Tennessee]); 1834, Obs. 1: 183. Figured holotype USNM 84701.
- troostii Lea, Unio: 1870, Synopsis Unionidae, 4th edit., p. 39. Substitute name for Unio troostensis Lea 1834.
- troschelianus Lea, Unio: 1852, TAPS 10: 280, pl. 23, fig. 39 (Goosawattee River, Murray Co., Georgia); 1852, Obs. 5: 36. Figured holotype USNM 84790.

trossulus Lea, Unio: 1843, Desc. Twelve Uniones (Lake Monroe, Florida). Changed to:

trossulus Lea, Unio: 1846, TAPS 9: 278, pl. 40, fig. 6; 1848, Obs. 4: 36. Figured holotype USNM 84705.

tryonii Lea, Anodonta: 1862, PANSP 14: 169 (Schuylkill River above Philadelphia; Delaware River at League Island [both Philadelphia Co., Pennsylvania]; Flemington [= Farmington, Hartford Co.], Connecticut; Westfield [Hampden Co.], Massachusetts; Potomac River near Chain Bridge, above Washington, D. C.); 1866, JANSP (2) 6: 28, pl. 10, fig. 27; 1867, Obs. 11: 32. Figured holotype USNM 86572 from the Delaware River.

tuberosus Lea, Unio: 1840, PAPS 1: 286 (Caney Fork [of the Cumberland River] and Cumberland Rivers, Middle Tennessee); 1842, TAPS 8: 210, pl. 14, fig. 25; 1842, Obs. 3: 48. Figured holotype USNM 84219.

tumescens Lea, Unio: 1845, PAPS 4: 164 ([Red River] Alexandria [Rapides Parish], Louisiana); 1848, TAPS 10: 71, pl. 3, fig. 7; 1848, Obs. 4: 45. Figured holotype USNM 84646.

tumidulus Lea, Unio: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2) 3: 295, pl. 25, fig. 9; 1857, Obs. 6: 15. Figured holotype USNM 84712.

- tuomeyi Lea, Unio: 1852, TAPS 10: 256, pl. 13, fig. 4 (Abbeville District [Savannah River drainage], South Carolina); 1852, Obs. 5: 12. Figured holotype USNM 85669.
- turgidulus Lea, Unio: 1858, PANSP 10: 40 (Cumberland River, Tennessee; [Tennessee River], Florence [Lauderdale Co.], Alabama); 1861, JANSP (2) 5: 62, pl. 5, fig. 211; 1862, Obs. 8: 66. Figured holotype USNM 84946 from the former locality.
- turgidus Lea, Unio: 1838, TAPS 6: 11, pl. 5, fig. 11 (near New Orleans, [Orleans Parish, Louisiana]); 1838, Obs. 2: 11. Figured holotype USNM 84277.
- tuscumbiensis Lea, Unio: 1871, PANSP 23: 191 ([Tennessee River] Tuscumbia [Colbert Co.], Alabama; Holston River, East Tennessee); 1874, JANSP (2) 8: 11, pl. 3, fig. 7; 1874, Obs. 13: 15. Figured holotype USNM 84593 from the former locality.
- uhareensis Lea, Unio: 1868, PANSP 20: 145 (Uharee [Uwharee] River, Montgomery Co., North Carolina); 1868, JANSP (2) 6: 304, pl. 46, fig. 116; 1869, Obs. 12: 63. Figured holotype USNM 85576.
- umbrans Lea, Unio: see under umbrosus Lea, Unio: 1857.



umbrosus Lea, Unio: 1856, PANSP 8: 95 (Medellin River, [Vera Cruz State], Mexico); 1857, JANSP (2) 3: 311, pl. 30, fig. 26; 1857, Obs. 6: 31. Figured holotype USNM 84848.

umbrosus Lea, Unio: 1857, PANSP 9: 32 (Othcalooga [Oothkalooga] Creek, Gordon Co., Georgia); non Lea 1856. Changed to:

umbrans Lea, Unio: JANSP (2) 4: 72, pl. 13, fig. 53; 1858, Obs. 6: 72. Figured holotype USNM 85121.

unicolor Lea, Unio: 1845, PAPS 4: 163 ([Black Warrior River], Tuscaloosa [Tuscaloosa Co.], Alabama); 1848, TAPS 10: 74, pl. 4, fig. 12; 1848, Obs. 4: 48. Known only from the figured holotype USNM 85750.

uruguavensis Lea, Anodonta: 1860, PANSP 12: 92 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 393, pl. 48, fig. 302; 1863, Obs. 10: 29. Known only from the figured holotype USNM 86753.

uruguayensis Lea, Unio: 1860, PANSP 12: 90 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 388, pl. 45, fig. 298; 1863, Obs. 10: 24. Known only from the figured holotype USNM 85166.

utriculus Lea, Unio: 1845, PAPS 4: 164 (North Carolina); 1848, TAPS 10: 69, pl. 1, fig. 3; 1848, Obs. 4: 43. Figured holotype USNM 85172.

validus Lea, Unio: 1871, PANSP 23: 189 (Duck River, Tennessee);

1874, JANSP (2) 8: 6, pl. 1, fig. 2; 1874, Obs. 13: 10.

Known only from the figured holotype USNM 84583.

vallatus Lea, Unio: 1868, PANSP 20: 145 (Alabama River);

1868, JANSP (2) 6: 315, pl. 50, fig. 128; 1869, Obs. 12:

75. Known only from the figured holotype USNM 84275.

vanuxemensis Lea, Unio: 1838, TAPS 6: 36: pl. 11, fig. 31

(Cumberland River, Tennessee); 1838, Obs. 2: 36.

Figured holotype USNM 85146.

vanuxemii Lea, Unio: 1858, JANSP (2) 4: 83. New name for

Unio vanuxemensis Lea [lapsus calami]. 1858, Obs. 6:

83.

varicosus Lea, Unio: 1831, TAPS 4, 90, pl. 11, fig. 20 (Ohio);

1834, Obs. 1: 100. Figured holotype USNM 84320.

vaughanianus Lea, Unio: 1838, TAPS 6: 5, pl. 3, fig. 5

(Sawneys Creek, near [about 8 mi NW] Camden [Kershaw Co.], South Carolina); 1838, Obs. 2: 5. Two syntypes USNM 86106 one a bit smaller than the figure, the other with the outline of the figure, but with less prominent rays. The figure appears to be a composite.

venustus Lea, Unio: 1838, TAPS 6: 4, pl. 2, fig. 4 (Potosi,

[Big River drainage, Washington Co.], Missouri; Cincinnati [Hamilton Co.], Ohio); 1838, Obs. 2: 4. Figured holotype USNM 84971 from the former locality.

- veracruzensis Lea, Unio: 1868, PANSP 20: 150 ([Rio Medellin]  
Vera Cruz [Vera Cruz State] Mexico); 1868, JANSP (2) 6:  
320, pl. 52, fig. 133; 1869, Obs. 12: 80. Known only from  
the figured holotype USNM 25432.
- verreauianus Lea, Unio: 1856, PANSP 8: 94 (Cape of Good  
Hope); 1857, JANSP (2) 3: 301. pl. 27, fig. 16; 1857,  
Obs. 6: 21. Figured holotype USNM 84418.
- versus Lea, Margaron: 1870, Synopsis of Unionidae, 4th edit.,  
p. 46. New name for Unio inornatus Reeve. See under:  
inornatus Reeve, Unio.
- verus Lea, Unio: 1861, PANSP 13: 40 (Cahawba River, Perry  
Co., Alabama); 1861, JANSP (2) 5: 83, pl. 11, fig. 231;  
1862, Obs. 8: 87. Figured holotype USNM 84589.
- verutus Lea, Unio: 1859, PANSP 11: 171 (Flat Rock Creek, near  
Columbus, [Muscogee Co.], Georgia); 1860, JANSP (2) 4:  
385, pl. 53, fig. 160; 1860, Obs. 8: 17. Figured holotype  
USNM 85899.
- vesicularis Lea, Unio: 1872, PANSP 24: 156 (Lake Ocheechobee  
Florida); 1874, JANSP (2) 8: 37, pl. 12, fig. 34; 1874,  
Obs. 13: 41. Figured holotype USNM 85292.

- vestitus Lea, Unio: 1861, PANSP 13: 393 (Ogeechee River, Georgia); 1862, JANSP (2) 5: 189, pl. 25, fig. 259; 1863, Obs. 9: 11. Figured holotype USNM 85332.
- vicinus Lea, Unio: 1856, PANSP 8: 262 (Swift Creek, near Macon [Bibb Co.], Georgia); 1858, JANSP (2) 4: 61, pl. 9, fig. 43; 1858, Obs. 6: 61. Figured holotype USNM 85543.
- virens Lea, Anodonta: 1852, TAPS 10: 290, pl. 28, fig. 53 (Red River, Alexandria, [Rapides Parish], Louisiana); 1852, Obs. 5: 46. Figured holotype USNM 86666.
- virens Lea, Unio: 1857, PANSP 9: 169 (Georgia); 1858, JANSP (2) 4: 80, pl. 16, fig. 60; 1858, Obs. 6: 80. Figured holotype USNM 85544.
- virescens Lea, Unio: 1858, PANSP 10: 40 (Tennessee River, Tuscumbia [Colbert Co.], Alabama); 1860, JANSP (2) 4: 341, pl. 55, fig. 166; 1860, Obs. 8: 23. Figured holotype USNM 84927.
- virgulata Lea, Anodonta: 1857, PANSP 9: 86 (Roanoke River, Weldon, [Halifax Co.], North Carolina; Washington Co., Georgia); 1862, JANSP (2): 5: 213, pl. 33, fig. 282; 1863, Obs. 9: 35. Figured holotype USNM 86593 from the former locality.

- viridans Lea, Unio: 1859, PANSP 11: 170 (near Columbus [Muscogee Co.], Georgia); 1860, JANSP (2) 4: 337, pl. 54, fig. 162; 1860, Obs. 8: 19. Figured holotype USNM 85579.
- viridicatus Lea, Unio: 1857, PANSP 9: 170 (Buckhead Creek Burke Co., Georgia); 1858, JANSP (2) 4: 87, pl. 18, fig. 67; 1858, Obs. 6: 87. Figured holotype USNM 85551.
- viridiradiatus Lea, Unio: 1859, PANSP 11: 154 (Big Uchee River [Creek, Russell Co., Alabama] near Columbus, Georgia); 1860, JANSP (2) 4: 336, pl. 53, fig. 161; 1860, Obs. 8: 18. Figured holotype USNM 86018.
- viridulus Lea, Unio: 1863, PANSP 15: 193 (Neuse River, near [6 mi. E] Raleigh, [Wake Co.], North Carolina); 1866, JANSP (2) 6: 10, pl. 3, fig. 7; 1867, Obs. 11: 14. Known only from the figured holotype USNM 85908.
- vittatus Lea, Unio: 1859; PANSP 11: 153 (Australia; Cuming); 1860, JANSP (2) 4: 249, pl. 38, fig. 128; 1860, Obs. 7: 67. Figured holotype BMNH 1958.4.3.1; paratype USNM 84407.
- vondenbushiana Lea, Margaritana: 1840, PAPS 1: 288 (Java); 1842, TAPS 8: 222, pl. 18, fig. 39; 1842, Obs. 3: 60. Known only from the figured holotype USNM 86348.
- waccamawensis Lea, Unio: 1863, PANSP 15: 193 (Waccamaw Lake, North Carolina); 1866, JANSP (2) 6: 16, pl. 5, fig. 16; 1867, Obs. 11: 20. Figured holotype USNM 84437.

wahlametensis Lea, Anodonta: 1838, TAPS 6: 78, pl. 20, fig. 64  
(Wahlamet [Willamette River], near its junction with the  
Columbia River [Oregon]); 1838, Obs. 2: 78. Figured  
holotype USNM 86363.

wardiana Lea, Anodonta: 1838, TAPS 6: 46, pl. 14, fig. 42  
([Ohio and Erie Canal] near Chillicothe [Ross Co.] Ohio);  
1838, Obs. 2: 46. Figured holotype USNM 86488.

wardii Lea, Unio: 1861, PANSP 13: 392 (Walhonding River, Ohio;  
Wassepinicon River, Iowa; Coal River, Logan Co., Virginia);  
1862, JANSP (2) 5: 187, pl. 24, fig. 257; 1863, Obs. 9: 9.  
Figured holotype USNM 84237 from the first locality.

watereensis Lea, Unio: 1836, Synopsis of Naiades, First edit.,  
p. 31. New name for Unio ravenelii Conrad 1834, non Unio  
ravenelianus Lea 1834. Conrad's name was not preoccupied.

weldonensis Lea, Unio: 1863, PANSP 15: 191 (Roanoke River,  
Wheldon [Halifax Co.], North Carolina); 1866, JANSP (2)  
6: 11, pl. 3, fig. 8; 1867, Obs. 11: 15. Figured holotype  
USNM 85407.

wheatleyanus Lea, Unio: 1856, PANSP 8: 94 (Rio Plata [Argentina],  
Orbigny; Rio Negro, 1200 mi. from mouth of Amazon [River,  
Brazil]; Wheatley); 1857, JANSP (2) 3: 303, pl. 29, fig.  
3; 1857, Obs. 6: 28. Figured holotype USNM 85335 labeled,  
"Montevideo, Uruguay, Wheatley."

wheatleyi Lea, Anodonta: 1852, TAPS 10: 287, pl. 26, fig. 49

(Para, Brazil); 1852, Obs. 5: 43. Known only from the figured holotype USNM 86723.

wheatleyi Lea, Monocondylaea: 1862, PANSP 14: 176 (River Tigris, [Iraq]); 1863, JANSP (2) 5: 400, pl. 50, fig. 307; 1863, Obs. 10: 35. Figured holotype USNM 86331.

wheatleyi Lea, Unio: 1857, PANSP 9: 85 (Catawba River, Gaston Co., North Carolina). Erroneously thought preoccupied by Lea and changed to: Unio catawbensis, 1861, JANSP (2) 5: 54, pl. 1, fig. 200; 1861, Obs. 8: 58. Figured holotype USNM 85547.

whiteianus Lea, Unio: 1852, TAPS 10: 258, pl. 14, fig. 8 (near Savannah [Chatham Co.], Georgia); 1852, Obs. 5: 14. Figured holotype USNM 85658.

williamsii Lea, Anodonta: 1862, PANSP 14: 169 (Potomac River, below the White House, [District of Columbia]; below Mt. Vernon [Fairfax Co., Virginia]; Othcalooga [Oothkalooga] Creek, Georgia); 1866, JANSP (2) 6: 27, pl. 10, fig. 26; 1867, Obs. 11: 31. Figured holotype USNM 86687 from the second locality.

- wilsonii Lea, Unio: 1859, PANSP 11: 153 (Eastern Branch of Isaac's Plain [=River, Queensland, Australia]; 1860, JANSP (2) 4: 256, pl. 40, fig. 137; 1860, Obs. 7: 74. Holotype ANSP 41817, refigured by McMichael and Hiscock, 1958, Australian Jour. Marine and F. W. Res., 9: 399, pl. 2, figs. 8, 9.
- woodiana Lea, Symphynota: 1834, TAPS 5: 42, pl. 5, fig. 13 (China; W. W. Wood); 1834, Obs. 1: 154. Figured type not in the USNM or ANSP [lost].
- woodwardius Lea, Unio: 1857, PANSP 9: 170 (Etowah and Connasauga Rivers, Cass [now Bartow] Co., Georgia). Changed to:
- woodwardianus Lea Unio: 1859, JANSP (2) 4: 199, pl. 23, fig. 82 and pl. 29, fig. 103; 1859, Obs. 7: 17. Figured holotype USNM 84444 from the latter locality.
- wrightii Lea, Unio: 1865, PANSP 17: 75 (China); 1868, JANSP (2) 6: 283, pl. 39, fig. 97; 1869, Obs. 12: 43. Figured holotype USNM 84129.
- wymanii Lea, Anodonta: 1860, PANSP 12: 91 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 390, pl. 44, fig. 294; 1863, Obs. 10: 26. Figured holotype USNM 86609.
- wymanii Lea, Unio: 1860, PANSP 12: 90 (Uruguay River, [Argentina and Uruguay]); 1863, JANSP (2) 5: 381, pl. 42, fig. 289; 1863, Obs. 10: 17. Figured holotype USNM 84378.



wynegungaensis Lea, Unio: 1859, PANSP 11: 331 (Wynegunga River, 30 mi E of Nagpoor in the Deccan, Bengal); 1860, JANSP (2) 4: 271, pl. 45, fig. 151; 1860, Obs. 7: 89. Figured holotype USNM 85328.

yadkinensis Lea, Unio: 1872, PANSP 24: 156 (Yadkin River, near Salisbury [Rowan Co.], North Carolina); 1874, JANSP (2) 8: 32, pl. 10, fig. 29; 1874, Obs. 13: 36. Figured holotype USNM 85387.

youconensis Lea, Anodonta: 1867, PANSP 19: 81 (Upper Youkon River [Alaska]). Changed to:

youkanensis Lea, Anodonta: 1868, JANSP (2) 6: 287, pl. 40, fig. 99; 1869, Obs. 12: 47. Figured holotype USNM 86624.

zeiglerianus Lea, Unio: 1838, TAPS 6: 32, pl. 10, fig. 27 (Cumberland River, Tennessee); 1838, Obs. 2: 32. Figured holotype USNM 85130.

zigzag Lea, Unio: 1829, TAPS 3: 444, pl. 12, fig. 19 (Ohio; T. G. Lea); 1834, Obs. 1: 54. Type [lost].













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